SIERRA LEONE.

Annual Report

OF THE

Medical and Sanitary Department

For the Year 1936.

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MEDICAL DEPARTMENT,
FREETOWN, SIERRA LEONE,
July, 1937.

ANNUAL MEDICAL AND HEALTH REPORT, 1936.

SIR,

I have the honour to submit, for the information of His Excellency the Governor and for transmission to the Right Honourable the Secretary of State for the Colonies, the Medical Report on the Health and Sanitary conditions of Sierra Leone for the year 1936, together with the Returns, etc., appended thereto.

I have the honour to be,
SIR,
Your obedient servant,

PHILIP D. OAKLEY,
Director of Medical Services.

THE HONOURABLE
THE COLONIAL SECRETARY,
FREETOWN.

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Annual Report of the Medical and Sanitary Department for the Year 1936.

I—Administration.

(*a*) ESTABLISHMENT, INCLUDING VACANCIES, ACTING APPOINTMENTS AND PROMOTIONS.

MEDICAL AND HEALTH STAFF.

1 Director of Medical Services
1 Senior Specialist
1 Assistant Director of Medical Services (Health)
1 Medical Officer (Health)
2 Senior Medical Officers
10 Medical Officers of the Colonial Medical Services
1 Senior Medical Officer (Sierra Leone)
1 Pathologist (Sierra Leone)
5 Medical Officers (Sierra Leone)
1 Chief Sanitary Superintendent
2 Sanitary Superintendents.

EUROPEAN NURSING STAFF.

2 Senior Nursing Sisters
5 Nursing Sisters.

SUBORDINATE MEDICAL AND HEALTH STAFF.

1 Chief Dispenser
1 Assistant Chief Dispenser
1 Hospital Warden
1 Chief Store-keeper
10 First Class Dispensers
10 Second Class Dispensers
18 Third Class Dispensers
33 Male Nurses and Apprentices
23 Female Nurses and Probationers
4 Midwives
3 Health Visitors
42 Sanitary Inspectors and Learners
1 Head Attendant, Lunatic Asylum
1 Assistant Head Attendant, Lunatic Asylum
1 Matron, Lunatic Asylum
3 Female Attendants, Lunatic Asylum
10 Male Attendants, Lunatic Asylum
1 Laboratory Assistant.

There are, in addition to above, cooks, stokers, gate-keepers, watchmen, labourers, hospital porters, carpenter, motor-ambulance driver, etc.

Clerical Staff.

There are 17 clerks—1 Chief Clerk, 2 second grade, 14 third grade.

Temporary Assistance.

Owing to shortage of Medical Officers due to illness, Dr. G. E. C. Reffell was engaged temporarily from 8th June to 2nd July, inclusive.

Principal Acting Appointment.

Dr. W. Allan, acted as Medical Officer (Health) from 1st January to 16th June.

New Appointments.

Miss E. M. Atkins, appointed Nursing Sister on the 1st April and arrived Freetown on 11th April.

Dr. C. A. McComiskey, appointed Medical Officer 12th August and arrived Freetown 22nd August.

Miss A. Stewart, appointed Nursing Sister on 30th September and arrived Freetown on 10th October.

Transfers.

Miss M. C. Jennings, Nursing Sister, was transferred to Nigeria on 17th October.

Mr. E. S. George, Deputy Harbour-Master (Port and Marine Department), was transferred to this department *vice* Mr. S. G. Randall, Chief Clerk, transferred to the Port and Marine Department.

Retirements.

Dr. A. Cathcart, Medical Officer, retired on the 23rd May, on medical grounds.

Mr. M. O. Frazer, Chief Dispenser, retired on the 15th September.

2. (*b*) LIST OF ORDINANCES, ETC., AFFECTING PUBLIC HEALTH ENACTED DURING THE YEAR.

Ordinances.

Medical Practitioners, Dentists and Druggists (Amendment) Ordinance, 1936 (No. 22 of 1936).

Orders in Council.

Protectorate Health Areas (Amendment) Order in Council, 1936 (No. 16 of 1936).

Protectorate Health Areas (Amendment) (No. 2) Order in Council, 1936 (No. 19 of 1936).

Protectorate Health Areas (Amendment) (No. 3) Order in Council, 1936 (No. 24 of 1936).

Port Loko Health Area (Improvement Rate) Order in Council, 1936 (No. 26 of 1936).

Marampa Railway (Pepel) Health Area (Improvement Rate) Order in Council, 1936 (No. 27 of 1936).

Marampa Concession Health Area (Improvement Rate) Order in Council, 1936 (No. 28 of 1936).

Makeni Health Area (Improvement Rate) Order in Council, 1936 (No. 30 of 1936).

Kambia Health Area (Special Health Authority and Improvement Rate) Order in Council, 1936 (No. 31 of 1936).

Protectorate Health Areas (Amendment) (No. 4) Order in Council, 1936 (No. 32 of 1936).

Governor's Orders.

Exemption from House Tax (Protectorate Midwives Houses) Order, 1936 (No. 1 of 1936).

Bye-Laws.

Freetown (Slaughter-house) (Amendment) Bye-Law, 1936.

(*c*) FINANCIAL.

3. The following table gives the revenue and expenditure for the years 1935 and 1936.

Medical Revenue.	1935. £	*s.*	*d.*	1936. £	*s.*	*d.*
Hospital receipts	961	4	0	1,069	19	8
Sundry receipts (out-patients' fees, etc.)	1,059	11	4	1,219	0	7
Druggist fees	1	0	0	—		
Maintenance of lunatics	119	19	5	189	0	0
Departmental fines	4	17	6	4	18	9
Total	£2,146	12	3	£2,482	19	0

Medical Expenditure.	1935. £	*s.*	*d.*	1936. £	*s.*	*d.*
Personal Emoluments	35,349	13	8	36,158	7	10
Other Charges	11,567	3	2	12,585	8	9
Total	£46,916	16	10	£48,743	16	7

Sanitary Revenue.	1935. £	*s.*	*d.*	1936. £	*s.*	*d.*
Sanitary Services	3	3	9	—		
Maintenance of persons in quarantine	—			—		
Total	£3	3	9	—		

Sanitary Expenditure.	1935. £	*s.*	*d.*	1936. £	*s.*	*d.*
Personal Emoluments	8,446	7	0	8,908	2	10
Other Charges	8,569	8	2	9,241	7	0
Total	£17,015	15	2	£18,149	9	10

4. Ratios of combined Medical and Sanitary votes to total estimated revenue for the past five years :—

Year.	£	
1932	75,407	1 : 10·80
1933	73,092	1 . 10·67
1934	69,875	1 : 9·56
1935	66,094	1 : 10·29
1936	66,910	1 : 11· 9

ANALYSIS OF HOSPITAL EXPENDITURE ON DIETED HOSPITALS FOR THE YEAR 1936.

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Institution.	Total Number of Patients.	Daily Average Number of Patients.	Hospital Days.	Provisions from Store-keeper. Total.	Fresh Provisions. Total.	5 and 6 per Patient per Day.	Wines, Spirits, Minerals, Tobacco, Ice. Total.	8 per Patient per Day.	7 and 9 per Patient per Day.	Fuel, Light. Total.	Miscellaneous: Cleaning Materials, Hospital Equipment, Replacements.	Total of 5, 6, 8, 11 and 12.	5, 6, 8, 11 and 12 per Patient per Day.	Total Sum Recoverable from Paying Patients.
				£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Nursing Home ...	173	5·9	2,186	179 19 6	376 3 6	0 5 1	12 18 11	0 0 1¼	0 5 2¼	25 15 4	9 16 0	604 13 3	0 5 6½	833 13 11
Connaught Hospital	2,658	99·27	36,235	371 18 4	928 17 5	0 0 8¾	9 4 0	—	—	63 17 0	59 3 7	1,433 0 4	0 0 9½	236 5 9
Lunatic Asylum ...	1,091	99·53	33,044	82 0 1½	553 19 7	0 0 4¾	40 15 0	—	—	18 9 0	3 0 0	698 3 8½	0 0 5	230 2 6
Kissy Infirmaries ...	1,042	94·35	34,441	80 11 8¾	564 11 0	0 0 4½	15 10 9	—	—	18 9 0	3 0 0	682 2 5¾	0 0 4¾	—
Bonthe Hospital ...	561	15·2	5,549	12 7 6	46 2 1	0 0 2½	2 14 0	—	—	13 12 5	—	74 16 0	0 0 3	9 15 3

II—Public Health.

(*a*) GENERAL REMARKS.

(*i*) General Diseases.

5. The number of patients attending the various hospitals in the Colony and Protectorate shows an increase of 13,348. The greatest increase being in the Protectorate. This result is very satisfactory as it shows that the people are becoming more educated to European medicine. It is not thought that the increase is due to the people being in a poorer state of health because, owing to the continued prosperity, the standard of living has improved. This fact is borne out by the decrease in avitaminosis. The incidence of malaria is about the same but the number of cases of yaws and chronic rheumatism have increased. The increase in yaws is probably due to the increased facilities for treatment. No major epidemic has occurred.

6. The outbreak of smallpox which commenced in 1932 is gradually declining owing to vaccination. Twelve cases were imported into Freetown from the Protectorate. These cases gave rise to a small localised outbreak which was easily controlled.

7. One case of Yellow Fever in an African adult was reported from Daru, a Protectorate station 214 miles distant from Freetown. This case will receive further consideration under the appropriate heading.

8. Three cases of tropical typhus were definitely diagnosed by means of the Weil Felix reaction. One of these cases occurred in an European undertaking the investigation of the disease and was undoubtedly a laboratory infection.

9. The following is a short report by Professor R. M. Gordon :—

"Tropical Typhus in Sierra Leone.

"In the past, tropical typhus, although a disease of considerable importance in North "and East Africa, has not been recorded from the British Colonies in West Africa. "It will be seen from the figures already quoted in the report that three cases of "the disease occurred in Freetown during the year 1936; up to the time of writing, "March, 1937, three further cases of typhus have been diagnosed. It is not yet "possible to state how widespread is its range in Sierra Leone, but it seems "probable that further investigation will establish its presence in the Protectorate "as well as in the Colony.

"The experiments at present being carried on in the Liverpool School of Tropical "Medicine Laboratory in Freetown suggest that two types of the disease are occur- "ring amongst the human population, and that the so-called "X19" type is "endemic amongst the rat population. In the past Sierra Leone has been fortunate, "in comparison with other British West African Colonies, in its freedom from "plague, but if the reservoir of human typhus is present in the rat population "then it becomes obvious that the special rodent investigation, which has been "going on during the past two years, requires not only to be continued but to "have its scope increased."

10. *European Officials.*—The health of the European officials can be considered as satisfactory in spite of the fact that the invaliding rate per average number of officials resident was 11·03 (the highest for ten years). There were no official deaths. Of the 16 officials invalided, 8 or 50 per cent. can be directly attributed to Tropical disease and its results. The number of days lost through malaria per 1,000 residents is high, being 459.

TABLE I.

Health of European Officials.

Table showing Sick, Invaliding and Death-rates of European Officials.

—	1934.	1935.	1936.
Total number of officials resident	208	207	211
Average number resident	144	145	145
Total number on sick list	143	149	147
Total number of days on sick list	1,231	1,696	1,624
Average daily number on sick list	3·37	4·64	4·43
Percentage of daily sick to average number resident ...	2·34	3·2	3·05
Average number of days on sick list to each patient ...	8·60	11·38	11·04
Average sick time to each resident	8·54	11.69	11·20
Total number invalided	9	7	16
Percentage of invalidings to total resident	4·32	3·38	7·58
Percentage of invalidings to average resident	6·25	4·82	11·03
Total number of deaths	—	3	—
Percentage of deaths to total resident	—	1·44	—
Percentage of deaths to average number resident	—	2·06	—

Causes of Invaliding and Deaths of European Officials.

Causes.	Invalided.	Died.
Blackwater fever	1	—
Cyclitis	1	—
Debility	1	—
Diabetes	1	—
Gastric ulcer	1	—
Jaundice	1	—
Malaria and celulitis of arm	1	—
Multiple peripheral neuritis	1	—
Neurasthenia	2	—
Pyrexia	1	—
Pyorrhœa	1	—
Pyuria	1	—
Secondary anæmia	1	—
Subacute endocarditis	1	—
Ulcer	1	—
Total	16	—

11. The invaliding rate of European officials for the past ten years is shown below.

Year	Average Number Resident.	Total Number of Invalidings.	Percentage of Invalidings to Average Resident.
1927	250	16	6·40
1928	280	9	3·21
1929	251	11	4·38
1930	260	3	1·15
1931	177	8	4·51
1932	176	6	3·40
1933	153	7	4·51
1934	144	9	6·25
1935	145	7	4·82
1936	145	16	11·03

12. There has been a slight decrease in the total number of non-officials resident and a larger decrease in the average number resident. It cannot be said that the health of the non-officials has been as satisfactory as in 1935. Four deaths occurred, one more than in 1935, and 21 non-officials were invalided which is the highest for three years. Of the four deaths only one can be directly attributed to Tropical diseases, and 10 of the 21 persons invalided.

TABLE II.

Health of European Non-Officials.

Table showing Sick, Invalidings and Death-rates of European Non-Officials.

—	1934.	1935.	1936.
Total number of non-officials resident	442	511	504
Average number resident	306	399	356
Total number on sick list	87	64	95
Percentage of sick to average number resident	28·43	16·04	26·68
Average number of days on sick list to each patient ...	—	—	—
Average sick time to each resident	—	—	—
Total number invalided	13	7	21
Percentage of invalidings to total resident	2·94	1·37	4·16
Percentage of invalidings to average number resident ..	4·24	1·75	5·89
Total deaths	—	3	4
Percentage of deaths to total resident	—	·58	·79
Percentage of deaths to average number resident ...	—	·75	1·12

Causes of Invalidings and Deaths of European non-officials.

Causes.	Invalided.	Died.
General injuries	1	—
Anæmia and worms	1	—
Appendicitis	1	1
Biliary colic	1	—
Blackwater fever	—	1
Carcinoma	—	1
Dysentery	3	—
Erysipelas	1	—
Gastric malaria	1	—
Heart disease	1	—
Hydrocele	1	—
Leg injury	1	—
Collapse of left lung	1	—
Nervous breakdown	4	—
Phlebitis	1	—
Pneumonia	—	1
Prostate complication	1	—
Typhoid	1	—
Not amenable to climate	1	—
Total	21	4

13. *African Officials.*—In spite of the fact that the total number of African officials shows a large increase the total number of days spent on the sick list shows a very welcome decrease of 1,393 days. The death-rate and the invaliding rate show a decrease. It is interesting to note that of the two deaths neither of them was directly attributed to Tropical diseases and only one of the eleven officials invalided. The health of the African officials can, therefore, be considered as satisfactory.

TABLE III.

Health of African Officials.

Tables showing Sick, Invalidings and Death-rates of African Officials.

——	1934.	1935.	1936.
Total number of officials resident	930	928	960
Average number resident	920	908	930
Total number on sick list	530	497	442
Total number of days on sick list	6,536	7,222	5,829
Average daily number on sick list	17·90	19·78	15·92
Percentage of daily sick to average number resident	1·94	2·17	1·71
Average number of days on sick list to each patient ...	12·33	14·53	13·18
Average sick time to each resident	7·10	7·95	6·26
Total number invalided	7	11	11
Percentage of invalidings to total resident ...	·75	1·18	1·14
Percentage of invalidings to average number resident	·76	1·21	1·18
Total deaths	7	7	2
Percentage of deaths to total resident	·75	·75	·2
Percentage of deaths to average number resident ...	·76	·77	·21

Causes of Invalidings and Deaths of African Officials.

Causes.	Invalided.	Died.
Defective vision following exacerbation of Iritis ...	1	—
Enlarged heart and myocardial degeneration	1	—
Enlarged heart and failure of compensation	1	—
Glaucoma	1	—
Hyperpiesis and myocarditis	1	—
Hyperpiesis and general debility	1	—
Leprosy	1	—
Myocarditis	1	—
Neoplasm—left thorax	1	—
Nephritis and V.D.H.	1	—
Pneumonia	—	2
Severe secondary anæmia and general debility	1	—
Total	11	2

TABLE SHOWING THE COMPARATIVE FIGURES OF THE HEALTH OF AFRICAN OFFICIALS FOR THE LAST TEN YEARS.

Year.	Average Number of Officials.	Number on Sick List.	Number of Days off Duty through Sickness.	Average Sick Time to each Official.	Number Invalided.	Percentage of Invalidings to Average Number.	Total Deaths.	Percentage of Deaths to Average Number.
1927	1,000	933	7,919	7·91	20	2·00	4	0·40
1928	1,050	967	6,415	6·10	25	2·38	9	0·85
1929	969	1,057	7,415	7·72	8	0·83	6	0·61
1930	970	1,048	9,052	9·33	12	1·23	8	0·92
1931	884	959	7,863	8·5	11	1·24	7	0·79
1932	880	680	5,464	6·20	4	0·45	5	0·56
1933	950	861	6,347	6·68	10	1·05	4	0·42
1934	920	530	6,536	7·10	7	0·75	5	0·75
1935	908	497	7,222	7·95	11	1·21	7	0·77
1936	930	442	5,829	6·26	11	1·18	7	·21

TABLE IV.

Health of African Troops.

14. The health of the African Troops has been satisfactory. One death has been reported as against nil in 1935. The number of men on the sick list shows a decrease of 91, and the sick rate per 1000 a decrease of 213.

Royal West African Frontier Force (Non-European).

Average Strength of Battalion in 1936.	Total Number of Deaths.	Death-rate per 1,000.	Total Number of Men on Sick List.	Sick Rate per 1,000.
369	1	2·71	275	745

TABLE V.

Health of African Police.

15. The total strength of the Force shows an increase of one. There have been 4 deaths as against one in 1935. The total number of men on the sick list and the sick rate per 1000 show a decrease. The health of the African Police can be considered satisfactory.

Total Number of Men.	Total Number of Deaths.	Death-rate per 1,000.	Total Number of Men on Sick List.	Sick Rate per 1,000.
266	4	15·03	174	654

TABLE VI.

Health of Prisoners and Mental Patients.

16. A special report on these is found in Section III—Prisons and Asylums.

17. It would not be out of place to mention, at this juncture, the visit of Dr. Cunyngham Brown, C.B.E., who was sent out by the Colonial Office to investigate the question of lunacy in the West African Colonies. Dr. Cunyngham Brown expressed himself as satisfied as to there being no conditions which called for immediate remedy in this Colony, but, at the same time, put forward certain suggestions as to future improvements. Dr. Cunyngham Brown undertook an extensive tour of inspection in the Protectorate and expressed satisfaction at the family care of the mentally deficient.

TABLE VII.

Institutional Treatment.

18. There has, once more, been an increase in the number of patients attending the various hospitals both in in-patients and out-patients.

19. Subsequent attendances also show a very large increase. The total number of deaths recorded show a decrease of 7. Registration is being gradually improved and these figures tend to become more reliable each year.

—	1934.	1935.	1936.
In-Patients:			
European — Colony	103	143	186
European — Protectorate	—	—	1
African — Colony	3,500	3,655	3,837
African — Protectorate	1,676	1,814	1,757
Out-Patients:			
European — Colony	350	185	338
European — Protectorate	115	175	137
African — Colony	48,436	48,486	52,710
African — Protectorate	47,418	49,058	57,804
Total	101,598	103,516	116,770
Deaths:			
European — Colony	—	4	2
European — Protectorate	—	1	—
African — Colony	256	277	255
African — Protectorate	78	102	120
Total	334	384	377
Percentage of deaths to total number treated	·32	·37	·32
Showing decrease or increase of total number of patients treated	+3,950	+1,919	+13,348
Subsequent attendances	339,845	362,119	381,158

20. The following table gives the numbers of diseases for which patients attended the various hospitals and dispensaries. Several diseases such as yaws, chronic rheumatism, acute bronchitis, dental caries, constipation and venereal diseases show an increase. Avitaminosis, on the other hand, shows a decrease.

	1935.	1936.
Malaria	7,718	7,942
Yaws	6,539	8,202
Acute rheumatism	—	2
Chronic rheumatism	7,642	10,671
Hemiplegia	110	137
Conjunctivitis	903	1,075
Affection of the ear	940	1,149
Hæmorrhoids	96	102
Lymphadenitis (bubo non-specific)	620	664
Coryza	1,100	1,146
Acute bronchitis	6,905	7,342
Chronic bronchitis	5,301	5,542
Asthma	202	245
Caries, pyorrhœa etc.	1,627	1,916
Gastritis	440	502
Dyspepsia	3,827	4,420
Diarrhœa and enteritis	1,434	1,716
Ankylostomiasis	172	405
Hernia	924	1,104
Constipation	8,334	9,701
Acute nephritis	82	105
Schistosomiasis	65	98
Epididymitis	40	70
Orchitis	237	249
Hydrocele	262	380
Abscess	500	774
Scabies	1,296	1,742
Eczema	230	327
Osteitis	274	355
Arthritis	1,624	1,806
Wounds by cutting or stabbing	745	1,205
Fracture	218	238
Other external injuries	5,132	4,639
Asthenia	951	895
Syphilis	566	769
Gonorrhœa	2,526	2,755
Avitaminosis	1,311	969

(*ii*) Communicable Diseases.

21. *Malaria.*—Preventive measures against malaria are detailed in Section IV—Hygiene and Sanitation. A further method against the ravages of malaria was inaugurated during the year. This method consisted of the distribution of tablets of quinine so that the inhabitants of the Protectorate could purchase quinine without having to proceed to the nearest dispensary or store. This quinine has been on sale at all Post Offices throughout the Colony and Protectorate and has also been distributed by the Political Officers when they have been touring the more remote parts of their districts. The quinine is sold at 3d. per tube of 16 x 2 grain tablets. This procedure has been much appreciated and, after the initial rush, in which the stocks were sold out in three weeks, a steady sale has been maintained. By this method quinine is brought within the reach of everybody. There were seven deaths from Blackwater Fever, one in an European mission lady, and six in Syrians, in the Protectorate. 129 Europeans were treated for malaria during the year compared with 156 in the previous year, a decrease of 27.

22. The following table shows the relative position of malaria as a cause of lost time in Europeans during the last five years :—

Year.	Average Number Resident.	Total Sick. Days.	Total Days spent on Sick List for Malaria.	Total Days spent on Sick List for other Causes.	Percentage of Malaria Days to Total Days.	Number of Days lost through Malaria for year per 100 Residents.
1932	176	1,235	370	865	29·95	210
1933	153	1,564	372	1,792	23·78	243
1934	144	1,231	595	636	48·33	413
1935	145	1,696	568	1,128	33·49	391
1936	145	1,624	666	958	41·00	459

23. *In Africans.*—There is a small increase in the number of cases of malaria 7,813 as against 7,562 in 1935. Four deaths from malaria have been reported during the year.

24. The following table gives the figures for the past three years :—

Diseases.	1934.	1935.	1936.
Malaria—tertian	26	83	59
Malaria—quartan	119	147	106
Aestivo autumnal	852	631	811
Unclassified	5,185	6,836	6,597
Cachexia	13	14	258
Blackwater	2	7	11
Total cases of malaria (all types) ...	6,197	7,718	7,942

25. *Typhoid Fever.*—19 cases of typhoid have been reported during the year with 5 deaths. All these cases have been sporadic and it has not been possible to definitely trace the source of infection.

26. *Blackwater Fever.*—There have been 11 cases with one European death which occurred in a Mission lady in the Karene District, and 6 deaths in Syrians.

27. *Trypanosomiasis.*—Three cases have been reported from the Protectorate during the year. There were no deaths.

28. *Smallpox.*—The epidemic of smallpox is gradually burning itself out. There was a localised outbreak in Freetown due to an imported case. Full details will be found in Section IV, sub-section B.

29. *Dysentery.*—A further increase in this disease is recorded, namely, 575 cases as against 480 in 1935. Amongst Europeans there were 11 cases with no deaths. In Africans there were 564 cases with 7 deaths.

30. *Tuberculosis.*—No cases have been reported amongst Europeans. In Africans 273 cases with 25 deaths have been reported as against 172 cases with 16 deaths. As stated in the 1935 report these figures should be accepted with considerable reserve.

31. *Leprosy.*—195 new cases have been reported as against 245 in 1935.

32. During the year Dr. E. Muir, Medical Secretary to the British Empire Leprosy Relief Association, visited the Colony and undertook a tour of inspection. Dr. Muir put forward several suggestions which are being embodied in the Leper Settlements which are now under consideration. Several Paramount Chiefs have expressed their willingness to assist in the erection of these settlements and two are being proceeded with at once.

33. *Guinea Worm.*—No cases of guinea worm have been reported.

34. *Relapsing Fever.*—No cases of relapsing fever have been reported.

35. *Yaws.*—There has been an increase of 1,663 in the number of cases treated. This increase is, probably, accounted for by the increase in the facilities for treatment.

36. *Venereal Diseases.*—There has been a slight increase in the number of cases both of syphilis and gonorrhœa. It is considered that the increase in shipping and the greater fluctuation of population is, probably, the main cause of the increase.

Diseases.	1932.	1933	1934.	1935.	1936.
Gonorrhœa	2,114	2,236	2,234	2,526	2,756
Syphilis	388	616	476	566	769
Total	2,502	2,852	2,710	3,092	3,525

37. *Beriberi.*—Ten cases and 2 deaths have been reported from the Protectorate. All these cases were widely separated and there was no epidemic.

38. *Avitaminosis.*—A decrease of 342 is recorded. This decrease is due to the increased prosperity of the people and a better standard of living.

39. This disease was discussed with Dr. A. Clark and Dr. E. J. Wright who had been investigating the cyanogenetic properties of the various species of yams. The outcome of this discussion being an attack on the careless preparation of cassada for human consumption. The danger of careless preparation of cassada was pointed out by means of pamphlets and broadcast talks and the people urged to take every precaution so as to exclude the cyanogenetic property of the tuber.

40. *Rabies.*—There were no human cases of rabies during the year. 99 persons received anti-rabic treatment, the majority of these being amongst labourers employed as dog catchers. The restrictions imposed under section 3 of the Animals' Diseases Ordinance, 1924 (Cap. 7 of the Laws of the Colony), were in force during the whole year.

41. *Plague.*—No cases have been reported during the year. The total number of rats trapped during 1936 was 6,892. Of these, 4,644 were dissected and examined for plague with negative results. 712 live rats were examined for ecto-parasites and 2,133 fleas were obtained of which 83·5 per cent. were X.brasiliensis and 16·5 per cent. X.cheopis. The flea rate being 3 per rat.

42. *Cerebro-spinal Meningitis.*—No cases have been reported during the year.

43. *Cancer.*—Three cases have been reported amongst Europeans with one death. The fatal case was that of an American sailor who was landed at Freetown *in extremis* and died shortly after admission. In Africans there were 42 cases with 6 deaths. Only those cases actually diagnosed histologically are shown as cancer.

44. *Yellow Fever.*—One case of yellow fever has been reported during 1936. This case occurred in a soldier of the Sierra Leone Battalion, Royal West African Frontier Force, stationed at Daru. The patient had been on leave in a village called Baiama, roughly, 45 miles from Daru. The patient recovered and his blood was sent to Lagos for the protection test. The result was positive. About this time a suspected case had been reported from Macenta in French Guinea, just across the border, and the Paramount Chief of Kailahun reported that there were many cases of jaundice at Kisi Dougou in French Guinea. All precautions were taken and an intensive inspection of the surrounding villages undertaken. All the blood specimens taken in Baiama itself were negative to the protection test, but at Yengema, the headquarters of the Sierra Leone Selection Trust, Limited, and Koidu, another small village close to one of the main diamond deposits situated, roughly, 30 miles north of Baiama, several blood specimens gave a positive reaction. At Yengema, 42·8 per cent. were positive, and at Koidu 55·5 per cent. These specimens were taken from children under ten years so it is reasonable to presume that there has been an epidemic in this district in recent years.

(*b*) VITAL STATISTICS.

General Population.

REPORT OF THE CHIEF REGISTRAR OF BIRTHS AND DEATHS.

General.

45. The table hereunder shows the administrative and executive staffs of the births and deaths registration. Registration machinery now covers the whole Colony and thirty-one stations in the Protectorate.

The present staff consists of :—

Chief Registrar Deputy Chief Registrar The Chief Registrar's Clerk	Stationed in Freetown.

	Colony.	Protectorate.
Registrars stationed at	Freetown	Pujehun
	Regent	Shebar
	Wilberforce	Moyamba
	Kissy	Bo
	Tassoh Island	Daru
	Murray Town	Makeni
	Wellington	Port Loko
	Hastings	Panguma
	Hamilton	Sefadu
	Sussex	
	Kent	
	Waterloo	
	Russell	
	York	
	Makomba	
	Songo Town	
	Banana Island	
	Sherbro Judicial District	
Deputy Registrars stationed at	Freetown	Pujehun, Sulima, Potoru, Sumbuya, Mattru, Moyamba, Sembehun, Bauya, Mabang, Mano, Bo, Kenema, Segbwema, Daru, Bandajuma, Pendembu, Kailahun, Kabala, Makeni, Port Loko, Batkanu and Kambia
	Cline Town	

46. The appointment of Chief Registrar is held *ex officio* by the Assistant Director of Medical Services (Health), and that of the Deputy Chief Registrar by the Medical Officer (Health) *ex officio*. Registrars, 27 in number, are appointed by the Governor and are chosen from the Medical Officers or from educated citizens in non-medical stations. Deputy Registrars posts, 23 in number, are filled by dispensers or educated citizens. No new registries were opened during the year.

47. The system of registration remains the same as in former years and is quoted merely for easy reference :—

(*a*) It is compulsory in the case of all non-natives born or dying in the Protectorate. The term non-natives is meant to cover Europeans, Asiatics, etc., and Colony-born Africans.

(*b*) It may be made compulsory in any chiefdom or part of a chiefdom, in respect of all natives born or dying in such chiefdom or part of a chiefdom, but only when a request to Government has been made by the Paramount Chief concerned.

(*c*) Notwithstanding the above provisions, any native in the Protectorate say, if he so wishes, may give information of a person born or dying in the Protectorate, *i.e.* Permissive Registration.

As previously stated, the present organisation covers the whole of the Colony, though it must still be pointed out that the figures obtained cannot be taken as a true indication of the morbidity of the people. Only in Freetown do the figures approximately disclose the true conditions, owing to the rigid control of cemeteries and the detection of live-births by Sanitary Inspectors and Health Visitors in the course of their daily duties.

48. In the Pujehun District of the Protectorate good results have been obtained, but where Permissive Registration only is in force, only time and education can change the present lack of interest.

Population.

49. The 1931 Census gave the following figures :—

Comparative populations of Freetown, Colony and Protectorate, 1931.

——	Males.	Females.	Persons.
Whole Colony	52,552	43,870	96,422
Freetown (including Cline Town) ...	30,011	25,347	55,358
Colony (excluding Freetown and Cline Town)	22,541	18,523	41,064
Protectorate	796,392	875,666	1,672,058
Natives	793,877	873,913	1,667,790
Non-natives	2,515	1,753	4,268

50. It has been possible to estimate a crude increase of population in the case of Freetown only; the 1936 mid-year population is estimated at 62,314 and the rates quoted in the various tables following are calculated on this figure.

51. No Legislation affecting Registration was enacted during the year.

Registration in Freetown.

52. *Births.*—The number of births registered shows a small increase over those for 1935, while the rate per 1,000 also shows a very slight increase even when calculated on the estimated mid-year population for 1936, viz., 62,314.

A table comprising the figures and rates for the past three years is given below :—

Year.	Births.			Rate per 1,000 Population.
	Males.	Females.	Total.	
1934	690	649	1,339	22·4
1935	707	651	1,358	22·9
1936	766	671	1,437	23·0

The proportion of male to female births was 111·15 : 100.

53. *Deaths.*—The number of deaths recorded in 1936 shows a small decrease from the figure for 1935, and the rate per 1,000 calculated on the estimated mid-year population is again slightly lower.

54. A table comprising the figures and rates per 1,000 is given below :—

Year.	Deaths.			Rate per 1,000 Population
	Males.	Females.	Total.	
1934	774	587	1,361	22·8
1935	740	635	1,375	22·5
1936	728	569	1,297	20·8

The continued gradual increase in the birth rate coupled with the continued fall in the death rate is gratifying.

55. The number of deaths registered under Medical Certificates was 43·5%, an increase of 5% compared with an increase in 1935 of 2%.

56. As in former years all cases of non-certified deaths were investigated by the Medical Officer (Health) and his officer prior to registration. Though carried out primarily in the interests of Public Health these investigations and the information elicited do enable a provisional diagnosis to be made, and though far from ideal it is all that can be equitably achieved until by the slow process of evolution the populace has learned the value of skilled medical aid.

57. The Table " J " below gives a list of those diseases which are shown as the main causes of death. 1936 was a much drier year than 1935 and both respiratory diseases and malaria show decreases. A general list of the causes of deaths is given in Table " M."

58. *Infantile and Child Mortality.*—The rate for 1936 again showed a decrease, being 210 as compared with 227 for 1935. As in former years the greatest incidence of mortality fell within the first three months of birth by which time 74·5% of all deaths under one year had taken place, an increase of 6·7% in this period.

59. The figure 210 per 1,000 appears high when compared with rates obtaining in more organised communities situated in temperate climates, but it is the lowest ever recorded in this Colony and low when compared with rates for former years when ante-natal and child welfare work did not exist. The utilisation of these now well organised services leads one to expect a gradual reduction through the succeeding years.

60. The accompanying Tables " C ", " D " and " E " show in comparative form the births, deaths and infantile mortality rates for the whole Colony, Freetown, and the Colony excluding Freetown respectively, while from Table " F " which shows the infantile mortality rate for Freetown for certain age periods it will be seen that 33·84% of all children born failed to survive the first five years, and that of these deaths the first year took a total of 23·23%. The rate for deaths under one year shows an increase of 1·76%.

61. Table " G " shows the principal causes of deaths in infants under one year. When compared with a similar table for 1935 it will be seen that deaths from convulsions were markedly less, while malaria claimed 31 and unknown causes 58.

62. *Maternal Mortality.*—It is satisfactory to be able to record a further decrease in these maternal mortality figures. Notwithstanding the greater number of total births the number of fatal results to parturient women fell from 16 to 14 and the rate per 1,000 live-births fell from 11·78 to 9·7.

Registration in the Colony.

63. As explained in the general remarks no reliance can be placed on the figures obtained from the registration districts outside Freetown. At the best they represent but a proportion of the births and deaths taking place and cannot be used for the compilation of any accurate figures. The machinery exists but only time and custom will induce the African to register, and this object is better obtained by persuasion than coercion.

64. The figures of births, deaths, and infantile mortality rates for the Colony excluding Freetown are shown in Table " E ".

Registration in the Protectorate.

65. During the year it was not found possible to extend the scope of the organisation to embrace more Protectorate towns, but it will be seen from Table " B " that something has been achieved by the stations opened in December, 1935. A large increase is to be noted from the Pujehun District of the Southern Province.

66. As in former years, merely the total numbers of births and deaths registered are given, and these totals represent but a small fraction of the true number.

PHILIP D. OAKLEY,
for Chief Registrar.

TABLE A.

Births and Deaths recorded at all Registration Districts in the Colony—1936.

DISTRICTS.	BIRTHS.			DEATHS.			DEATHS UNDER TWELVE MONTHS.		
	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.
Freetown and Clinetown ...	766	671	1,437	728	569	1,997	177	126	303
Wilberforce	47	40	87	42	47	89	12	16	28
Murray Town	15	13	28	17	18	35	6	4	10
Regent	22	21	43	25	25	50	7	7	14
Kissy	28	24	52	92	78	170	13	14	27
Wellington	50	34	84	39	31	70	10	14	24
Hastings	49	49	98	52	39	91	14	18	32
Waterloo	30	41	71	30	31	61	4	5	9
Makomba	95	73	168	72	44	116	14	12	26
Songo Town	67	65	132	68	40	108	10	5	15
Russell	42	24	66	66	45	111	12	5	17
Kent	10	9	19	8	7	15	3	1	4
Bananas Island	5	2	7	10	6	16	—	1	1
York	18	19	37	16	15	31	7	3	10
Sussex	10	11	21	8	9	17	3	4	7
Hamilton	21	19	40	27	17	44	8	3	11
Tassoh Island	45	47	92	34	26	60	17	11	28
Sherbro Judicial ...	26	29	55	63	46	109	12	6	18
Total	1,346	1,191	2,537	1,397	1,093	2,490	329	255	584

TABLE B.

Births and Deaths recorded at all Registration Districts in the Protectorate—1936.

DISTRICTS.	BIRTHS.			DEATHS.			DEATHS UNDER TWELVE MONTHS.		
	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.
Northern Province.									
Port Loko	7	7	14	33	34	67	4	5	9
Kambia	7	6	13	23	12	35	3	4	7
Batkanu	17	13	30	12	20	32	3	7	10
Makeni	8	6	14	9	3	12	—	1	1
Kabala	4	6	10	6	6	12	1	1	2
Southern Province.									
Mabang	8	10	18	18	7	25	4	—	4
Bauya	5	3	8	4	4	8	—	1	1
Moyamba	24	33	57	8	6	14	—	3	3
Sembehun	—	—	—	1	5	6	—	—	—
Mano	2	1	3	3	—	3	—	—	—
Bo	10	9	19	22	12	34	3	1	4
Sumbuya	1	—	1	19	9	28	—	—	—
Kenema	6	10	16	13	19	32	4	5	9
Panguma	11	13	24	35	28	63	3	—	3
Koidu	7	3	10	5	—	5	—	—	—
*Bandajuma	—	—	—	—	—	—	—	—	—
Segbwema	1	—	1	—	—	—	—	—	—
Daru	3	8	11	19	7	26	2	3	5
Pendembu	12	10	22	16	10	26	6	2	8
Kailahun	6	6	12	16	10	26	1	1	2
Pujehun	755	817	1,572	37	23	60	9	4	13
Potoru	123	117	240	63	57	120	27	21	48
Sulima	113	131	244	8	1	9	2	—	2
Matru	51	60	111	45	45	90	10	5	15
Shebar	1	2	3	—	—	—	—	—	—
Total ...	1,182	1,271	2,453	415	318	733	82	64	146

*Registrar not available.

TABLE C.

Births, Deaths and Infant Mortality Rates for the whole Colony of Sierra Leone (including Freetown), for the last five years.

Year.	Estimated Mid-year Population.	Births Registered.	Crude Birth-rate per 1,000 Population.	Deaths Registered.	Crude Death-rate per 1,000 Population.	Number of Deaths under Twelve Months.	Infant Mortality per 1,000 Live Births.
1932	97,921	2,439	24·9	2,404	24·5	567	233
1933	99,239	2,326	23·4	2,205	22·2	540	232
1934	100,587	2,273	22·5	2,384	23·7	530	233
1935	101,967	2,389	23·4	2,424	23·7	552	231
1936	103,378	2,537	24·5	2,490	24·0	584	230

TABLE D.

Births, Deaths and Infant Mortality Rates, Freetown, 1932–1936.

1932	56,857	1,276	22·4	1,400	24·6	348	272
1933	58,175	1,378	23·6	1,229	21·1	317	230
1934	59,523	1,339	22·4	1,361	22·8	312	233
1935	60,903	1,358	22·9	1,375	22·5	308	227
1936	62,314	1,437	23·0	1,297	20·8	303	210

TABLE E.

Births, Deaths and Infant Mortality Rates, Colony (excluding Freetown), for the last five years.

1932	41,064	1,163	28·3	1,004	24·4	219	198
1933	41,064	948	23·0	976	23·7	223	235
1934	41,064	934	22·7	1,023	24·9	218	233
1935	41,064	1,031	25·0	1,049	25.5	244	236
1936	41,064	1,100	26·7	1,193	29·0	281	255

TABLE F.

Number of deaths in certain periods under one year and during the next four years of age, Freetown, 1936.

—	No. of Deaths.	Percentage of Deaths under One Year.	Death-rate per 1,000 Live Births.
Under 24 hours	49	16·1	34·0
1–7 days	93	30·6	64·6
1–2 weeks	41	13·5	28·5
Total under 2 weeks*	183	60·3	127·3
2–4 weeks	18	5·9	12·5
Total under 1 month	201	66·3	139·8
1–3 months	25	8·2	17·3
Total under 3 months	226	74·5	157·2
3–6 months	34	11·2	23·6
6–9 months	22	7·2	15·3
9–12 months	21	6·9	14·6
Total under 1 year	303	100	210·8

—	No. of Deaths.	Percentage of Total Deaths.	†Death-rate per 1,000 Living at all Ages.
0–1 year	303	23·3	4·8
1–2 years	65	5·0	1·0
2–3 ,, ...	39	3·0	·6
3–4 ,, ...	19	1·4	·3
4–5 ,, ...	13	1·0	·2
Total 1–5 years ...	136	10·4	2·8
Total 0–5 years ...	439	33·8	7·0
Deaths at all ages ...	1,297	—	20·8

* This represents the period within which births must be registered.

† The death-rate per 1,000 living at each age is not available because of the unusual age grouping adopted in the Census Report.

TABLE G.

Causes of Deaths under Twelve Months.

Freetown, 1936.

International List Number.	Causes.	No.	Certified.
13 ...	Dysentery	1	1
22 ...	Tetanus	5	1
22 ...	Tetanus neonatorum ...	15	5
36a ...	Septicaemia	2	—
36b ...	Pyaemia	1	—
38 ...	Malaria	47	3
38 ...	Tertian malaria	1	1
63 : 1 ...	Rickets	1	1
66d ...	Tetany	2	2
69 : 2 ...	Toxaemia	1	—
82a ...	Cerebral Haemorrhage ...	1	—
82a : 1 ...	Sub-dural haemorrhage ...	3	1
86 ...	Infantile convulsions ...	1	1
87e ...	Convulsions	8	—
95b : 2 ...	Heart disease (undefined) ...	1	1
106 ...	Bronchitis	5	—
106a ...	Acute bronchitis ...	12	2
107 ...	Broncho-pneumonia ...	16	8
107 ...	Bronchial pneumonia ...	1	1
108 ...	Apical pneumonia ...	1	—
109 ...	Pneumonia	8	2
112 ...	Bronchial asthma ...	2	1
118 : 2 ...	Dilatation of stomach ...	1	1
119 & 120a : 2	Diarrhoea	5	3
119 & 120a : 2	Enteritis	2	2
119 & 120a : 2	Infantile diarrhoea ...	1	1
119 & 120a : 2	Gastro-enteritis	3	3
123 : 1 ...	Constipation	1	—
158 ...	Congenital debility ...	15	11
158 ...	Want of vitality	1	1
158 ...	Malnutrition	1	1
158 ...	Marasmus	7	2
159 ...	Prematurity	37	7
160b ...	Dystocia	2	1
161a ...	Atelectasis	11	3
161a ...	Dyspnoea	2	2
161c ...	Septic Infection of umbilicus	4	1
200 : 2 ...	Debility	5	—
200 : 2 ...	Fever	4	—
200 : 3 ...	Unknown	66	5

TABLE II.

Maternal Deaths associated with Pregnancy and Child-bearing, Freetown, 1936.

International List Number.	Causes of Death.	Number of Deaths.			Maternal Mortality Rates per 1,000 Live Births.
		Certified.	Uncertified.	Total.	
142	Extra-Uterine Pregnancy ..	1	—	1	
149	Difficult labour	1	—	1	
149	Contracted pelvis	1	—	1	:—Other unspecified conditions of pregnancy=4·8
150 : 3	Child-birth	—	1	1	
150 : 3	Parturition (unqualified) ...	—	3	3	
141 : 2	Incomplete abortion ...	1	—	1	:—Puerperal sepsis=1·3
145a	Puerperal sepsis	1	—	1	
144b	Post-partum hæmorrhage ...	1	—	1	:—Puerperal hæmorage=·6
146 : 1	Eclampsia (unqualified) ...	1	—	1	
147	Toxæmia of pregnancy ...	3	—	3	:—Puerperal albuminuria =2·7
	Total	10	4	14	

The maternal mortality rate was 9·7 per 1,000 Live Births (8·9 per 1,000 total births).

TABLE I.

Deaths at various Ages up to Twelve Months with Percentages of Total Deaths under Twelve Months, Freetown, 1935 and 1936.

Year.	Number of Deaths at Ages and Percentages of Total Deaths Under Twelve Months.									
	Under 24 Hours	24 Hours to 2 Weeks.	Total under 2 Weeks.	2-4 Weeks.	Total under 1 Month.	1-3 Months.	Total under 3 Months.	3-6 Months.	6-12 Months.	Total under 12 Months.
1935.	42 or 13·6 per cent.	113 or 36·6 per cent.	155 or 50·3 per cent.	21 or 6·8 per cent.	176 or 57·1 per cent.	33 or 10·7 per cent.	209 or 67·8 per cent.	39 or 12·6 per cent.	60 or 90·4 per cent.	308
1936.	49 or 16·17 per cent.	134 or 44·2 per cent.	183 or 60·3 per cent.	18 or 5·9 per cent.	201 or 66·3 per cent.	25 or 8·2 per cent.	226 or 74·5 per cent.	34 or 11·2 per cent.	43 or 14·1 per cent.	303

TABLE J.

Principal Causes of Deaths, Freetown (including Cline Town), 1936.

———	No.	Proportion per 1,000 Deaths. from all Causes.	Certified.
Bronchitis and pneumonia	213	164	52
Malaria	152	117	18
Pulmonary Tuberculosis	88	68	25
Diarrhœa and Dysentery	72	56	12
Senility	62	45	11
Valvular disease	43	33	10
Prematurity	36	27	7
Nephritis	36	27	25
Strangulated Hernia	27	21	8
Cerebral hæmorrhage	23	17	9
Convulsions	10	7	10
Hemiplegia	9	7	3

The number of deaths registered on Medical Certificates was 382, comprising 29·4 per cent. of the deaths registered.

TABLE K.

Death Certificates, Freetown and Kissy, 1935 and 1936.

YEAR.	European Hospital.	Connaught Hospital.	P. C. M. Hospital.	Kissy Institution.	Private Practitioners.
1935 ...	4	251	25	79	161
1936 ...	1	198	13	89	293

TABLE L.

Mortality according to Age and Sex.—Freetown, 1936.

	Under 24 hours.	24 hours to 1 year.	1–5 years.	5–15 years.	15–25 years.	25–45 years.	45–65 years.	65 years and over.	
Males	25	152	70	30	40	187	150	77	731
Females	24	102	66	38	22	95	104	115	566
Persons ...	49	254	136	68	62	282	254	192	1,297

TABLE M.

Causes of Death—Freetown (including Cline Town), 1936.

International List Number.	Cause.	No.	Certified.
1 ...	Typhoid fever	4	4
6 ...	Smallpox	1	—
9 ...	Cough	1	—
13 ...	Dysentery	32	—
13a ...	Amœbic dysentery ...	9	2
13b ...	Bacillary dysentery ...	1	1
22 ...	Tetanus	15	6
22 ...	Tetanus neonatorum ...	24	5
23 ...	Tuberculous broncho-penumonia	1	1
23 ...	Tuberculous of lungs ...	1	1
23 ...	Pulmonary tuberculons ...	81	20
23 ...	Phthisis	6	4
23 ...	Phthisis pulmonalis ...	1	1
25 ...	Tuberculous enteritis ...	1	1
25 ...	Tabes mesenterica ...	1	1
25 ...	Tuberculous peritonitis ...	1	1
32a ...	Miliary tuberculosis ...	1	1
32c ...	Generalised tuberculosis ...	2	2
33 ...	Leprosy	1	1
34 ...	Syphilis	2	2
36a ...	Septicæmia	23	6
36b ...	Pyæmia	1	—
38 ...	Quartan malaria	1	1
38 ...	Malaria	152	13
38 ...	Tertian Malaria	3	3
38 ...	Malignant tertian ...	1	1
39 ...	Yaws	3	—
40 ...	Ankylostomiasis	7	—
42 ...	Ascariasis	6	1
42 ...	Ascaris lumbricoides ...	1	1
42 ...	Worms	1	—
44 : 6 ...	Blackwater fever	1	1
45 ...	Cancer of maxilla ...	1	1
46 ...	Cancer of colon	2	2
46 ...	Cancer of rectum	1	1
46 ...	Cancer of stomach ...	2	2
46 ...	Cancer of liver	1	1
50 ...	Cancer of the breast ...	5	2
53 ...	Cancer of neck	1	—
53 ...	Cancer (unqualified) ...	5	5
54a ...	Fibroid uterus	2	2
55a ...	Tumour of uterus ...	1	—
56 ...	Acute rheumatism ...	1	1
56 ...	Rheumatism	1	—
57 : 1 ...	Chronic rheumatism ...	18	—
59 ...	Diabetes mellitus	3	3
61 ...	Beri-beri	1	1
63 : 1 ...	Rickets	2	2
66d ...	Tetany	3	3
69 : 2 ...	Toxæmia	1	1
71b : 1 ...	Splenic anæmia	1	1
73 : 2 ...	Rupture of spleen ...	1	1
73 : 2 ...	Splenitis	1	—
73 : 2 ...	Enlargement of spleen ...	1	—
73 : 2 ...	Abscess of spleen ...	1	1
75 ...	Acute alcoholism	1	1
82a ...	Cerebral hæmorrhage ...	20	8
82a : 1 ...	Sub-dural hæmorrhage ...	3	1
82b : 2 ...	Cerebral thrombosis ...	2	1
82c : 1 ...	Hemiplegia	9	3
82c : 2 ...	Paralysis	3	1
84b ...	Mania	1	—
85 ...	Epilepsy	3	2
86 ...	Infantile convulsions ...	1	—
87b ...	Peripheral neuritis ...	1	1
87e ...	Convulsions	9	—

TABLE M—*continued.*

Causes of Death—continued.

International List Number.	Cause.	No.	Certified.
92 : 2 ...	Mitral regurgitation ...	1	1
92 : 2 ...	Mitral incompetency ...	1	1
92 : 2 ...	Mitral stenosis	1	1
92 : 5 ...	Valvular disease	40	7
93 : 3 ...	Cardiac degeneration ...	5	3
93c ...	Myocarditis	2	1
95b : 2 ...	Cardiac disease	12	2
96 ...	Aneurysm	4	4
96 ...	Dilatation of aorta ...	1	1
97 : 1 ...	Arterio sclerosis	2	1
98b ...	Gangrene of foot	1	1
101 ...	Adenitis	3	—
103 ...	Internal hæmorrhage ...	1	1
105 : 2 ...	Oedema glottidis	2	2
106 ...	Bronchitis	23	1
106a ...	Acute bronchitis	22	1
106b ...	Chronic bronchitis ...	14	1
106b ...	Bronchiectasis	1	1
107 ...	Capillary bronchitis ...	1	1
107 ...	Bronchial pneumonia ...	1	1
107 ...	Broncho-pneumonia ...	69	10
108 ...	Apical pneumonia ...	1	—
108 ...	Lobar pneumonia ...	23	17
109 ...	Consolidation of lung ...	1	1
109 ...	Bilateral pneumonia ...	1	1
109	Pneumonia	57	11
109 ...	Double pneumonia ...	1	1
110 : 2 ...	Pleurisy	6	2
111 : 1 ...	Hypostatic penumonia ...	1	1
111 : 1 ...	Pulmonary congestion ...	1	1
112 ...	Asthma	1	—
112 ...	Bronchial Asthma ...	4	2
113 ...	Emphysema	1	1
114b : 1 ...	Gangrene of the lung ...	1	1
115 : 1 ...	Stomatitis	1	—
118 : 1 ...	Gestritis	2	1
118 : 2 ...	Dilation of stomach ...	1	1
118 : 2 ...	Dyspepsia	3	1
118 : 2 ...	Hæmatemesis	1	1
118 : 2 ...	Pernicious vomiting ...	1	1
119 & 120a : 2	Infantile diarrhœa ...	1	1
119 & 120a : 2	Intestinal catarrh ...	2	2
119 & 120a : 2	Diarrhœa	30	6
119 & 120a : 2	Intestinal toxaemia ...	2	2
119 & 120a : 2	Enteritis	8	3
119 & 120a : 2	Gastro-enteritis	3	3
121 ...	Gangrenous appendicitis ...	1	1
121 ...	Appendicitis	3	3
122a ...	Inguinal hernia	2	—
122a : 1 ...	Strangulated hernia ...	27	8
122b ...	Intestinal obstruction ...	2	2
123 : 1 ...	Constipation	2	—
124b ...	Cirrhosis of liver	3	2
125 : 2 ...	Hepatic abscess	1	1
127 : 2 ...	Catarrhal jaundice ...	1	1
129 ...	Peritonitis	3	3
129 ...	General peritonitis ...	3	3
130 ...	Sub-acute nephritis ...	7	2
130 ...	Acute nephritis	3	3
130 ...	Acute parenchymatous nephritis	1	1
131 ...	Chronic nephritis ...	27	25
132 ...	Nephritis	9	—
132 ...	Uræmia	4	3
133b ...	Hydronephrosis	1	1
135b ...	Retention of urine ...	7	2
136a ...	Stricture (unqualified) ...	1	1

TABLE M—*continued.*

Causes of Death—continued.

International List Number.	Cause.	No.	Certified.
136a	Stricture of the urethra	2	1
136b	Extravasation of urine	2	2
136b	Urethral fistula	1	—
137	Hypertrophy of prostate	2	2
138	Hydrocele	1	—
139a : 2	Pyosalpingitis	1	1
139a : 3	Pelvic inflammation	1	1
139c	Abscess of breast	1	—
141 : 2	Incomplete abortion	1	1
142	Extra-uterine pregnancy	1	1
144b	Post-partum hæmorrhage	1	1
145a	Puerperal sepsis	1	1
146 : 1	Eclampsia (unqualfied)	1	1
147	Toxæmia of pregnancy	3	3
149	Difficult labour	1	1
149	Contracted pelvis	1	1
150 : 3	Child-birth	1	—
150 : 3	Parturition (unqualified)	3	—
151	Carbuncle	1	1
153	Ulcer (unqualified)	4	2
154	Osteomyelitis	2	2
155	Osteitis	1	—
157c	Congenital heart disease	1	1
158	Asthenia	1	—
158	Congenital debility	18	11
158	Inanition	1	1
158	Malnutrition	1	1
158	Marasmus	10	3
158	Want of vitality	1	1
159	Prematurity	36	7
160	Difficult labour	1	1
160	Dystocia	3	3
161a	Atalectasis	14	2
161a	Dyspnoea	2	2
161c : 1	Septic infection of umbilicus	4	1
162b	Senility	62	11
180	Conflagration (injuries)	2	2
184	Accidental injury by firearms	1	1
193	Electric shock	1	1
194 : 2	Accidental fracture	23	8
195	Found drowned	3	3
198	Judicial execution	1	1
200 : 1	Cardiac failure	3	3
200 : 1	Cardiac exhaustion	1	—
200 : 2	Fever	6	—
200 : 2	Abdominal disease	1	—
200 : 2	Ascites	2	1
200 : 2	Debility	7	—
200 : 2	Hyperpyrexia	2	1
200 : 3	Unknown	93	—

TABLE N

Showing the population of Freetown and the Colony by nationality and sex at the Census of 1931.

	FREETOWN.			COLONY Apart from Freetown.			WHOLE COLONY.		
	Persons.	Males.	Females.	Persons.	Males.	Females.	Persons.	Males.	Females.
Protectorate native tribes	28,233	17,115	11,118	28,696	17,133	11,563	56,929	34,248	22,681
*Sierra Leoneans (Creoles)	20,970	9,353	11,617	11,876	5,085	6,791	32,846	14,438	18,408
Kroos (from Liberia)	4,460	2,392	2,068	21	12	9	4,481	2,404	2,077
Other African non-natives (from Nigeria, Gold Coast, Gambia, etc.	580	384	196	104	70	34	684	454	230
West Indians	83	55	28	13	8	5	96	63	33
Mulattoes	121	58	63	28	8	20	149	66	83
Various	226	166	60	148	97	51	374	263	111
†Europeans	286	210	76	‡135	99	36	421	309	112
‡Syrians	375	258	117	38	24	14	413	282	131
§Indians	19	16	3	4	4	—	23	20	3
Arabs (of African birth)	5	4	1	1	1	—	6	5	1
Total	55,358	30,011	25,347	41,064	22,541	18,523	96,422	52,552	43,870

* Creoles are the descendants of Liberated Africans who were placed in Sierra Leone in accordance with the enactments made for the suppression of the slave trade. They represent the Christain and educated class and are sometime called Sierra Leoneans. In Freetown their numbers increased from 15,791 in 1921 to 20,970 in 1931. The increase is partly due to persons returning from the Protectorate owing to lack of trade, and to the fact that there is a tendency for persons of purely aboriginal blood having embraced Christianity and obtained a little education, to describe themselves as Sierra Leonean. In the remainder of the Colony their numbers decreased by 555, which probably indicates a gradual movement from rural places to Freetown.

†The great majority are Government officials who live on the residential area at Hill Station, which is situated on the hills near Freetown.

‡ Of the total 413 Syrians, 90·8 per cent. reside at Freetown, where their numbers increased from 156 to 375 in the intercensal period. Elsewhere in the Colony their numbers increased from 21 to 38. Many have brought their wives and children out; the latter increased from 45 in 1921 to 131 in 1931. Of the total 22·7 per cent. were born in Sierra Leone. The males are all engaged in trade as merchant or as their clerks, salesmen or shop assistants. The Syrians are now well established as successful traders both in the Colony and Proteetorate *vide infra* and a steady increase in their numbers may be expected.

§ The number of Indians appears to fluctuate with trade conditions generally. In 1911 there were 24 in the Colony, 4 in 1921 and 23 in 1931. In 1921 there were 15 in the Protectorate, in 1931 only 2.

TABLE O.

Protectorate Population, Census 1931.

	*Non-Natives.									Aboriginal Natives.
	†Creoles.	§Europeans.	‡Syrians.	Indians.	Arabs.	West Indians.	¶Mullattoes.	Miscellaneous.	Total.	
Males ...	1,632	173	561	2	14	6	81	46	2,515	793,877
Females ...	1,414	58	192	—	3	—	60	26	1,753	873,913

*This represents the population for which registration of births and deaths is compulsory. Registration applies only to comparatively small and isolated districts where trading activities attract the presence of non-natives. Their number decreased by 339 during the intercensal period.

†The Creoles are for the most part traders, mercantile clerks, Government officials, catechists and school teachers. Their number decreased by 789 in the intercensal period, probably owing to the recent trade depression.

§The number of Europeans has been increased since the Census by the presence of staffs engaged in mining operations at Marampa, Makong, Maranda, Tonkolili, Yengema and various small prospecting camps throughout the Protectorate.

‡The Syrian population increased from 386 to 753, of whom 134 were born in Sierra Leone.

¶81·5 per cent. are African-Syrians.

TABLE P.

Showing population according to sex and sex-ratio at 1931 Census, total population figures for 1931 and mid-year (estimated) 1935, births and death-rates at Freetown and at Accra, Kumasi and Sekondi in the Gold Coast, 1935.

	Population.					Births 1935.	Birth-rate 1935.	Deaths 1935.	Death-rate 1935.	Deaths under one year 1935.	Infant Mortality.
	1931.				Mid-year 1935.						
	Males.	Females.	Ratio: Males : Females.	Persons.							
Freetown	30,011	25,347	118·4 : 100	55,358	60,903	1,358	22·9	1,375	22·5	308	227
Accra	32,833	27,893	117·7 : 100	60,726	69,057	2,772	40·1	1,696	24·0	—	140
Kumasi	21,219	14,610	140·5 : 100	35,829	40,987	888	21·6	861	21·0	—	148
Sekondi	10,020	6,933	144·5 : 100	16,953	20,120	444	22·1	307	15·3	—	83
England and Wales ...	—	—	92 : 100	—	—	—	—	—	—	—	—

III—Prisons and Asylums.

KISSY LUNATIC ASYLUM.

67. *Staff.*—Medical Officer-in-charge
First Class Dispenser
Chief Attendant
Assistant Chief Attendant
11 Male Attendants
Matron
3 Female Attendants
1 Cook
4 Porters.

68. There has been a marked decrease in the number of deaths during the period under review, a total number of 5 as against 11 in 1935.

69. The deaths were due to the following :—

1. Subacute nephritis-pneumonia
2. General sepsis
3. Pulmonary tuberculosis
4. Lobar pneumonia
5. Pulmonary tuberculosis-ascariasis.

70. The Male Visiting Committee made four visits and the Female Visiting Committee one visit. Parties from various religious associations made eight visits.

71. Dr. Cunyngham Brown visited the Asylum in September and interviewed each of the inmates.

72. Dr. E. Muir, Leper Commissioner, visited the Leper Ward on 18th June.

73. The following table gives the statistical details of in-patients during the year :—

	Males.	Females.	Total.
Remaining in Asylum 31st December, 1935	51	35	86
Admitted certified	1	2	3
Admitted under observation	47	11	58
Deaths amongst certified	4	1	5
Discharged after observation	34	8	42
Discharged as cured	2	—	2
Discharged on trial (Governor's Order)	—	—	—
Re-admitted	3	—	3
Absconded	1	—	1
Number of patients certified	11	1	12
Remaining in Asylum 31st December, 1936	59	37	96

ANNUAL MEDICAL REPORT ON THE FREETOWN PRISON FOR THE YEAR ENDED 31ST DECEMBER, 1936.

74. Dr. E. J. Wright, Senior Medical Officer (Sierra Leone) was in charge from 1st January to 8th May when he was relieved by Dr. W. J. Laird, Medical Officer. The latter continued up to 8th June when he was relieved by Dr. G. E. C. Reffell, a private Medical Practitioner. Dr. Laird again took over from Dr. Reffell on 3rd July and continued up to 20th October when Dr. E. J. Wright resumed duty. Dr. Wright remained in charge up to the end of the year.

75. Mr. P. Q. A. John was Resident Dispenser from 1st January to 20th May when he was relieved by Mr. I. B. Doherty who continued to the end of the year under review.

GENERAL HEALTH.

(*a*) Prison Officers.

76. *European.*—Good. Four minor complaints were treated during the year.

77. *Africans.*—Fairly good. There were 64 officers including two Government officials on the Prison Staff during the year. Of these, 19 were placed on the sick list for an aggregate period of 92 days and 12 were referred to the Connaught Hospital for institutional treatment ; one of whom was invalided from the service on medical grounds.

(*b*) Prisoners.

78. The general health of the prisoners throughout the year was good and there was no epidemic. There were 902 out-patient new cases treated with 10,409 subsequent attendances as compared with 678 and 9,287, respectively during the previous year. The prevailing diseases treated were :—Avitaminosis, diseases of digestive system, skin diseases and local injuries.

79. Four cases were remaining in hospital at the end of 1935 and 112 cases were admitted into Gaol Hospital. Two deaths took place during the year (1) on 1st January from chronic disseminated tuberculosis and on 7th October from chronic nephritis. Two prisoners with urethral stricture and one with abscess right hip were referred to the Surgical Specialist for treatment and were returned the former relieved and the latter cured. One case of chicken pox was discovered on 23rd May and one case of typhoid on 19th September. Isolation with precautionary measures were taken against a spread. The case of typhoid fever was transferred to the Connaught Hospital where he was admitted and thereafter discharged cured. No other prisoner had the infection.

80. One case of lobar pneumonia and two cases of amœbic dysentery with one undefined case of dysentery were admitted into hospital during the year and were eventually discharged from hospital cured.

81. One case was admitted with a severe attack of stomatitis and two (Europeans) with acute malaria all of which yielded rapidly to treatment. Eight prisoners were sent to the Mental Hospital, Kissy under Certificate of Emergency and were detained.

82. One condemned prisoner was executed on 19th May, 1936.

83. Apart from the Medical Officer's daily attendance prisoners reported at all hours with various complaints mostly trivial and on Wednesday afternoons, a medical inspection of all prisoners forms a regular routine and the administration of general prophylactic treatment is carried out.

84. The monthly weight of prisoners ranged between 84 and 214 pounds.

85. There were 360 specimens from prisoners with three months' sentence and over sent to the Pathological Laboratory for examination made up as follows :—

Fæces	312
Blood	36
Sputum	12
Total	360

and the findings were as follows :—

Ankylostoma ova	101
Ankylostome and ascaris ova	12
Ankylostome and ascaris and histolytica-cysts ...	1
Ankylostoma and strongyloides larvæ	8
Ankylostoma and E. coli cysts	7
Ankylostoma and E. histolytica cysts	3
Ascaris ova	24
Ascaris ova and strongyloides larvæ	1
Ascaris ova and strongyloides larvæ and E. coli cysts ...	1
Ascaris ova, strongyloides and trichuris larvæ	2
Tænia ova	12
Tæma and ankylostoma ova	3
Tæma and ankylostoma ova and E. coli cysts ...	2
Strongyloides larvæ	7
Trichuris ova	9
Trichuris and ankylostoma	1
Entamœba histolytica cysts	5
Entamœba coli cysts	4
Giardia cysts	3
Trichuris and ascaris ova	4
Trichuris ova and strongyloides larvæ	2
No parasites	100
Total	312

Blood.

Malaria tertian rings	15
Malaria quartan	3
Negative	18
Total	36

Sputum.

No acid fast bacilli	12

86. The sanitary condition of the Prison was satisfactory throughout the year.

87. A statistical Return is appended herewith.

INFECTIOUS DISEASES BULLETIN.

Tuberculosis 1 case, chicken-pox 1, typhoid 1, dysentery amœbic 2, dysentery undefined 1, pneumonia 1.

VISITS.

88. On 14th January—The Honourable Colonial Treasurer and Senior Assistant Colonial Secretary.

On 5th March—Mr. E. A. C. Noah—Visiting Justice.
On 18th March—Mr. E. H. Cummings, M.B.E.—Visiting Justice.
On 23rd May—The Visiting Justice.
On 9th June—His Excellency the Acting Governor.
On 19th June—Mr. E. A. C. Noah—Visiting Justice.
On 14th August—Mr. E. H. Cummings, M.B.E.—Visiting Justice.
On 8th October—Mr. E. A. C. Noah—Visiting Justice.
On 22nd October—The Visiting Justice.
On 19th November—Mr. T. A. Thompson—Visiting Justice,
On 16th December—His Excellency the Governor, Sir Henry Moore, K.C.M.G.

E. J. WRIGHT,
Senior Medial Officer, Sierra Leone.

FREETOWN PRISON,
20th January, 1937.

STATISTICAL RETURN OF THE FREETOWN PRISON FOR THE YEAR, 1936.

Remaining in hospital at the end of December, 1935	4
Admitted during the year 1936	112
Died during the year 1936	2
Remaining in hospital at the end of December, 1936	6
Daily average number of prisoners in gaol	233·15
Daily average number of prisoners in hospital	3·88

OUT-PATIENTS.

European Officials including Government Employees.

	New Cases.	Subsequent Attendances.
March quarter	—	—
June quarter	1	6
September quarter	1	7
December quarter	2	23
	4	36

African Officials including Government Employees.

	New Cases.	Subsequent Attendances.
March quarter	38	64
June quarter	33	74
September quarter	20	65
December quarter	8	9
	99	212

OUT-PATIENTS—PRISONERS.

	New Cases.	Subsequent Attendances.
March quarter	252	2,875
June quarter	222	2,611
September quarter	213	2,034
December quarter	215	2,889
	902	10,409

In-Patients.

———	Admitted.	Cured.	Relieved.	Not Relieved.	Died.	Observation.
March quarter	18	12	3	2	1	—
June quarter	29	19	10	—	—	—
September quarter ..	34	10	15	9	—	—
December quarter ..	31	13	10	6	1	1
	112	54	38	17	2	1

Prisoners.

———	New Admissions Examined	Remands and Trials.	Corporal Punishment.	Execution.	Solitary Confinement.
March quarter	202	22	—	—	41
June quarter	135	28	—	1	60
September quarter	228	27	—	—	86
December quarter	187	17	—	—	58
	752	94	—	1	245

———	1932.	1933.	1934.	1935.	1936.
Total number of prisoners admitted ..	749	895	788	813	752
Average strength	233	264	260	243	233
Total death excluding execution ..	7	5	2	4	2
Total number of prisoners on sick list ..	152	196	78	82	112
Daily average number on sick list ..	6·25	7·03	4·45	3·59	3·88
Daily sick rate per 1,000 average strength	26·82	26·51	17·10	12·34	12·87
Death-rate per 1,000 average strength ..	30·40	18·93	7·69	16·46	8·58

Prison.	Daily Average number in Custody in 1936.	Daily Sick Rate per 1,000 of Average Strength.	Death-rate per 1,000 of Average Strength.
Freetown	233	12·87	8·58
Kenema	63	4·76	31·74
Moyamba	28	107·14	35·71
Pujehun	11	90·9	—

E. J. WRIGHT,
Senior Medical Officer (Sierra Leone),
in charge of Freetown Prison.

Prisons Department,
Freetown.

IV—Hygiene and Sanitation.

A—GENERAL REVIEW OF WORK DONE AND PROGRESS MADE.

1—Preventive Measures.

(a) *Insect-borne Diseases.*

89. *Malaria.*—During the year the routine measures directed against insect-borne disease have been carried out with intensified vigour. In addition to the routine clearing of weeds and high bush, the oiling of pools and swampy low-lying areas, regular house to house inspection, etc., drainage of swamps has been carried out in certain stations in the Protectorate with very satisfactory results.

90. The canalisation of streams around Freetown has been proceeded with and new concrete drains have been laid replacing old brick drains which offered every facility for the breeding of mosquitoes. In addition, the prophylactic use of quinine has increased and a method has been introduced whereby the inhabitants in the more remote parts of the Protectorate can obtain quinine at a reasonable cost.

91. The report of the Medical Officer (Health) is given below, showing the activities of the Health Branch in the City of Freetown which can be taken as the routine measures adopted in all stations where Medical Officers are posted.

European Staff.

92. *Medical Officer (Health).*—Dr. W. Allan, Medical Officer (Health), left the Colony on the 17th June on leave and was relieved by Dr. E. H. Taylor-Cummings who took over the duties of Medical Officer (Health) as from that date until the end of the year.

93. *Sanitary Superintendents.*—Mr. P. Osment returned from leave on the 25th April. Mr. A. E. Wilkinson proceeded on leave on the 26th August. Mr. W. C. Seers, who is engaged in health work in the Protectorate, arrived in the Colony on the 28th March. He did temporary duties in this office from the 27th August to the 28th November.

African Staff.

94. There was one Third Grade Clerk, Mr. W. S. Archer Davies. A junior clerk from the City Council was seconded to this office for training.

95. *Sanitary Inspectors and Learners.*—There are :—

2 Second Grade Sanitary Inspectors
2 Third Grade Sanitary Inspectors
8 Fourth Grade Sanitary Inspectors
21 Fifth Grade Sanitary Inspectors
9 Sanitary Learners.

The total number of inspectorate staff is 42. Of this number, 18 Inspectors were detailed for duty at various stations in the Protectorate and 15 in Freetown and the Headquarters Judicial District. The 9 Sanitary Learners were all stationed in Freetown.

96. *Training of African Staff.*—All Fourth and Fifth Grade Sanitary Learners received practical training during the course of the year, and lectures were given once weekly for four months by the Medical Officer (Health). Towards the end of the year written and practical examinations were held based on the course of training. In addition there were six temporary Sanitary Learners under training. The results were satisfactory.

Health Work in Freetown.

97. The daily routine work continues to be satisfactory. From time to time it has been found difficult to maintain the amount of supervision necessary for efficient control and working of the staff, especially when there is a departure from the normal, as is often the case when the Health Branch is concentrating on preventing the spread of infectious diseases.

98. In the latter part of the year owing to the concealment of cases of smallpox, more so in the overcrowded eastern portion of the town and the village of Kissy, the Health Branch was compelled to work long hours at top pressure. Three Inspectors were recalled from the Protectorate for temporary duty in Freetown. Until vaccination is compulsory in the Colony and the Protectorate, the danger of an epidemic among the large numbers of non-immunes is evident.

Anti-Malarial Measures.

99. *Inspection of Compounds.*—Freetown, for the last few years, has not been so heavily plagued with Anopheles. This fact is no doubt due to the daily inspections of compounds, drains, trees rock-pools, quarries, and swampy areas.

100. The town is divided into fourteen sections. Each section is under a Sanitary Inspector who is detailed to inspect, advise and report on forty compounds daily. In addition to the routine inspection of compounds by sectional Inspectors, mass intensive inspections were organized from time to time, these drives gave excellent results in anti-malarial work. Surprise visits are paid either by the Medical Officer (Health), the Sanitary Superintendents or the Senior Sanitary Inspectors. The work of those in charge of sections was satisfactory.

101. During the year 129,548 compounds were inspected, as compared with 110,478 in 1935. 315 samples of mosquito larvæ were found. Summons are not issued for larvæ found in trees, rock-pools and cesspits. 382 prosecutions were made including 308 for mosquito larvæ; 365 persons were convicted. Below is a table of fines inflicted during the year :—

Offence.	Conviction	Fine		
		£	s.	d.
Mosquito larvæ	308	48	1	0
Insanitary cesspits	31	4	6	6
Insanitary compounds	12	1	19	0
Other offences including concealment of infectious disease ..	11	10	2	0
Obstructions	3	0	15	0
		£65	3	6

The larvæ were classified as follows :—

Anopheline	1	0·24 per cent. in compounds.
Culex	97	
Stegomyia	211	
Culex and Stegomyia	6	
Total	315	

102. After prosecution, specimens were sent to the Sir Alfred Jones Research Laboratory for detailed classification.

103. *Oiling.*—Anti-malarial oil was used. The oiling gangs consist of three headmen and nine labourers. At the beginning and end of the rains their work is considerably increased, but during the heavy rains it is correspondingly decreased. The seepage adjacent to the temporarily canalised brooks has to be constantly oiled; earth drains, rock-pools, ditches, disused quarries are visited and treated every six days.

104. The concrete drainage scheme undertaken by the Public Works Department continues to make progress; one of the most important concrete drains laid was that of Regent Road and adjacent feeder streets, in addition falls of old drains were correctly graded and defective drains were repaired.

105. Larvæ found in pools and gutters were more numerous in the western outskirts of the town. Pools and drains oiled were 27,989.

Anopheles	10	0·05 per cent. in pools and gutters.
Culex	4	
Stegomyia	nil	
	14	

106. *Inspection of Boats and Canoes.*—There were 5,712 boats and canoes inspected and one case of Anopheline larvæ found. (Larval index = 0·01%.)

107. At the Government Wharf larvæ of Aedes were found on one occasion in the channel iron of one of the sliding doors of the Customs Warehouse.

108. *Trees.*—Much useful work has been done in the inspection of trees for mosquito breeding. As long as Freetwon maintains its rural aspect, the culex and aedes mosquito will always be present. Much more remains to be done in order to lessen the larval index with a view to final extermination.

109. 131,763 trees were examined, holes and fissures were chipped and drained or were filled with a mixture of tar, sand and cement. Tree-felling gangs were employed throughout the year, and in addition old and dangerous trees belonging to private individuals were felled at their request.

Number of trees inspected	131,763	
Number of trees felled	214	
Nnmber of holes chipped	1,425	
Number of holes cemented	2,121	
Larvæ found :—		
Anopheles	Nil	0·07 per cent. in trees
Culex	25	
Aedes	69	
Culex and Aedes	2	
	96	

110. At Tower Hill near the Sir Alfred Jones Research Laboratory a large cotton tree is under suspicion as being a breeding place of mosquitoes The felling of this tree is being carried out as soon as possible.

111. *Cesspits.*—Some of the cesspits, especially during the rainy season, become water logged; these were regularly oiled. Their constant inspection is one of the branches of anti-malarial work in the compounds of Freetown. Although the danger of underground water pollution, since the closing of surface wells, has been considerably diminished, as potential breeding places of mosquitoes, cesspits are still very dangerous.

112. During the year 2,053 cesspits were oiled and 3,561 notices were served on occupiers to clean their cesspits and/or make structural repairs.

113. *Canalisation.*—Owing to the unusual late rains it was found unnecessary to temporarily canalise the streams as in former years.

114. Permanent canalisation by the Public Works Department was undertaken. The year's programme consisted of the canalisation of Sambah Gutter and the street drainage of the upper section of Wellington Street. It is hoped that it will not be long before all the streams running through and around the periphery of Freetown will be canalised. The permanent canalisation of Sanders Brook has been the means of diminishing the number of Anopheles in this area.

115. *Tins and Bottles.*—A gang, designated "Tins and Bottles" gang, is employed during the rainy season to collect empty tins and broken bottles; recently a lucrative market for empty bottles has been opened and most of the bottles now find their way to the local bottling factories.

116. *Bushing and Weeding.*—Both in Freetown and at Hill Station large weeding gangs have been employed during the year. Their work consists of clearing tall grass and bush in order to prevent the accumulation of old tins and bottles and to lessen insect pests.

Mosquito Larvæ Index.

	1934.	1935.	1936.
First quarter	0·29	1·14	0·29
Second quarter	2·00	1·43	1·43
Third quarter	2·68	nil	0·86
Fourth quarter	0·86	0·29	1·43

117. In addition, a weekly index is taken. The figures have shown an improvement. Conditions during the second and fourth quarters, as far as rainfall was concerned, were similar and almost identical. This fact probably accounts for the rise in the fourth quarter in the year.

Infectious Diseases.

118. *Smallpox.*—There were 29 cases of smallpox, 12 of which were imported; the type was virulent. There were 8 deaths giving a case mortality of 27·6 per cent. Two patients were found dead in private houses during the usual investigation into the cause of deaths. None of these fatal cases bore vaccination marks. Vaccination should be made compulsory in infancy in Freetown and a system evolved in which all entrants into the town by the main routes, sea, river and rail must be vaccinated before being allowed to mingle with

the town unprotected population. The staff has worked very hard in delimiting the outbreaks that were experienced, taking charge of corpses, disinfecting and burying them, removing cases to Kissy Infectious Diseases Hospital, disinfecting the houses and evacuating contacts to the Cape Quarantine Station. Two contacts developed the disease during the period of surveillance and were taken to Kissy by sea route.

119. An Infectious Diseases Ambulance is essential; refuse disposal lorries are not suited to the transport of a sick man over a distance of three miles, or a group of contacts to the Cape Quarantine Station.

120. 8,488 vaccinations were performed in Freetown during the year, over 6,000 being done in the month of December.

121. *Chicken Pox.*—There were 33 cases. One case originated from Wilberforce Barracks. One of the contacts developed the disease during the quarantine period.

122. *Pulmonary Tuberculosis.*—The incidence of this disease which has been increasing during recent years shows a very welcome drop, 76 cases of pulmonary tuberculosis were notified in 1936 as against 173 in 1935.

123. The disease is closely connected with overcrowding; and the almost universal practice of closing bedroom windows at night also the ignorance of the procedure to be adopted in isolating patients. When a case is notified the house is visited and disinfected after the removal of the patient. Propaganda work is being carried out in an attempt to limit the spread of this disease which undoubtedly runs a very rapid course in the tropics.

124. *Typhoid Fever.*—Sporadic cases appeared from time to time; 16 cases were notified in Freetown, one of which was an imported case; there were two deaths; in addition there was a case at Wilberforce Village and an imported case at Hill Station. The infection does not appear to arise from a common source owing to the sporadic nature of the cases which were not confined to a particular area. In one case the source of infection was traced to a previous fatal case. In another instance, a patient was suspected of being a carrier, but on examination the patient was found to be sterile to the bacillus typhosus and paratyphosus. Nevertheless, exposed and unprotected foodstuffs offered for human consumption are potential sources of infection; in addition the numerous cesspits in Freetown may have some bearing on the incidence of typhoid fever. Every case which was confirmed by laboratory findings was notified and rigorous methods to delimit the disease were taken.

125. Contacts were in several instances advised to receive the inoculation of T.A.B. vaccine, many of whom availed themselves of this opportunity.

126. *Plague.*—No cases have occurred during the year.

Between March 1st and August 31st, 3,660 rats were trapped and examined. There are five species of rats in Freetown. The black rats predominated. 2,600 were caught in comparison with 600 brown rats and 450 mice. The brown rats, however, are more numerous along the sea front. Twenty rats on the average were examined daily for bacillus pestis, no rat showed any signs of infection.

127. The rat flea index is estimated at 3. An investigation is in progress as regards the rat population of the city of Freetown.

128. *Yellow Fever.*—There was no case of yellow fever in Freetown during the year. Several cases were reported from neighbouring colonies and the Port Health work was considerably increased in the examination of suspected ships, crew and passengers.

129. The following other infectious diseases were notified :—

Diphtheria	1 case (at Hill Station)
Erysipelas	1 case
Infective paratitis	2 cases
Typhus fever	1 case

Refuse Collection and Disposal.

130. During the year 151,039 head loads of dry refuse, 5,708 head loads of tins and bottles, and 8,757 lorry loads were disposed of. 14,338 tons of refuse were deposited at Cline Town Refuse Disposal Siding in trucks which were taken by rail to the final disposal dump at Allen Town.

131. At various times when it was not possible to use the siding, refuse was dumped in vacant lands owned by private individuals mostly in the eastern part of the town, the usual precautions to render these temporary dumps free of flies, rats and other vermin were adopted.

132. On the completion of the extension of the Cline Town siding to accommodate seven trucks instead of five and with two shoots installed, all refuse will arrive at Allen Town on the day of collection. Refuse is still collected from public dust-bins which are for the most part unsightly, difficult to control, and a possible menace to increasing vehicular traffic.

133. The ideal method of house to house collection was tried but, owing to the inadequacy of the Health Branch Lorry Fleet, householders not having in their possession suitable and easily portable dust-bins with well-fitting lids, this method had to be abandoned for the time being.

134. The Health Committee of the City Council has recommended, and the City Council has approved, an indent for a large quantity of dust-bins. These will be sold to owners and occupiers of compounds at cost price. When these have been distributed it may be possible to reorganise the collection of refuse; it must, however, be remembered that Freetown bears a rural aspect, and there will be much bulky vegetable refuse, especially after the harvesting of crops and also after a tornado, which cannot be conveniently placed in the regulation size sanitary dust-bins.

135. Two new two-ton Bedford lorries were added to the fleet and two smaller wooden Morris lorries were taken off the road. It has been suggested that one of these be converted to an Infectious Diseases Ambulance; it will serve a double purpose, by relieving the refuse lorries which now have to be used to convey patients and contacts to hospital and isolation, and to give more comfort to those who have to use it as it is the only means of transport available.

136. 9,539 notices were served for the cleaning of compounds, etc.

Sewage Disposal.

137. 3,561 notices were served in 1936 for the cleaning of cesspits. 75 per cent. of the cesspits were in an unsatisfactory condition, even when notices were served, the repairs and cleaning were not effected with alacrity. The hotels, a few firms and private individuals have installed private water closets connected with septic tanks.

138. The public latrines, 15 in number, are fitted with buckets and the contents are emptied at recognised spots on the foreshore; this method is at once primitive and undesirable, it should be possible when an adequate water supply is available to have an almost universal water carriage system in Freetown with the effluent discharged at a point away from the immediate vicinity of the foreshore.

Inspection of Markets and Slaughterhouses.

139. All markets are inspected daily. A Senior Sanitary Inspector makes a weekly report on the cleanliness of the markets. Adjacent public latrines, dust-bins and the immediate environments. Some of the public markets are now provided with improved dust-bins; it is hoped to improve this type next year. Some of the markets like the King Jimmy, Water Street and Krootown Road markets require reconditioning and the Meat Market in Garrison Street fly-proofing and tiled.

140. Minor alterations and additions were made to the slaughterhouse and an extension of the meat inspection room is to be undertaken in 1937. Cold storage is necessary. Unsold meat at the close of the day is removed to the domiciles of the butchers.

141. The same procedure of examining cattle landing, their grazing grounds, careful inspection before slaughter and a final inspection of the carcase and viscera after slaughter is carried out daily.

142. Surprise visits are paid by the Medical Officer (Health) and the Sanitary Superintendent during slaughtering and it has been observed that the work is performed with efficiency.

143. During the year the following animals were slaughtered for human consumption :—

Bullocks	3,278
Sheep	184
Goats	399
Pigs	125

There has been a decrease as compared with 1935 and 1934; the figures for these years were :—

	1935.	1934.
Bullocks	4,274	4,460
Sheep	395	437
Goats	569	599
Pigs	136	139

The decrease in the number of animals slaughtered is due to smaller number arriving in Freetown owing to the French authorities having placed an embargo on cattle leaving French territory and the increased consumption in the mining areas.

144. The following carcases and livers were condemned after inspection :—

Cysticercus Bovis	16 bullocks
Angioma	510 lbs.
Abscess	198 lbs.
Fluke	328 lbs.

Foodstuffs.

145. Below is a list of foodstuffs exposed for sale that were destroyed as being unfit for human consumption. Most of these articles were seized and a Magistrate's Order was obtained before destruction. A few of the firms asked the Health Branch to collect and destroy unwholesome food :—

2 Smoked herrings
2 Tins salmon
1 Tin sardines
1 Tin cocoa
9 Barrels salt pork
20 Cases lemon barley water
10 Cases quinette lemon barley
1 Case putrid meat
2 Cases pears
26 lb. cabin bread
12 lb. potatoes
4 Tins Guinea Gold cigarettes
11 Tins cabbages
12 Tins endive
2 Tins (Tinappa) Pilchards
1 Tin nutrix food
1 Tin milk

146. *Bakeries, Tanneries and Other Trades.*—The premises were inspected regularly and nuisances reported and abated. Tanneries and dye-works are still carelessly supervised by their proprietors. Several specimens of mosquito larvæ were discovered from these sources.

Port Health Work.

147. Freetown was not in quarantine during the year.

148. Cases of yellow fever and plague have been reported from neighbouring colonies. A small epidemic of smallpox was reported from the Gambia.

Vaccinations were performed as follows :—

Deck passengers	576
Kroo boys	2,262

149. The following were "passed through" the Disinfecting Station :—

Deck passengers	837
Kroo boys	4,659

150. 825 ships entered the port during the year compared with 809 in 1935. The gross tonnage amounted to 2,485,750.

151. The following deck passengers and Kroo boys embarked and disembarked :—

Embarked:	Deck passengers	1,204
	Kroo boys	16,753
Disembarked:	Deck passengers	1,731
	Kroo boys	18,963

152. Vaccinations are performed on all deckers and Kroo boys who do not bear successful marks. Vaccination should be done at least nine days before embarking, but this is not always possible. All Kroo boys embarking from Freetown, all Kroo boys and deck passengers disembarking at Freetown are inspected on board and, if necessary, they and their effects are disinfected at the Disinfecting Station.

School Inspection.

153. School Welfare work has not been undertaken as a routine, but necessary inspections have been carried out as the occasion demanded. The school latrines still leave much to be desired; close inspection is undertaken, and a gradual improvement noticed. A new scheme for servicing is being prepared. The accommodation and the degree of cleanliness in the latrines of the Prince of Wales School is satisfactory.

Health Week.

154. The Annual Health and Baby Week was a great success; the full report submitted by Dr. Allan is attached.

Rabies.

155. *Dog Catching Gang.*—Owing to the presence of canine rabies and the number of stray dogs, this gang had to be considerably increased during the last quarter of the year. 1,849 dogs were caught during the year and destroyed. Dogs that were vicious and suspected to have been infected with rabies were detained in the dog pound for observation.

156. Thirteen dogs and 7 cats were examined post mortem. Sections of the brain were made, and negri bodies were demonstrated in 13 of them (12 dogs and 1 cat).

Miscellaneous.

157. A survey on overcrowding in one section in Freetown has been completed. A report has been forwarded depicting an undesirable conglomeration of slum houses with all its evil sequelæ.

158. Infant mortality is still high. A decrease for 1936 is recorded, but there is room for much greater improvement. Improper feeding, superstitious practices and ignorance are some of the difficulties with which authorities have to contend. Recent findings from autopsies show that unsuitable food is administered to infants only few months old.

Hill Station.

159. Larvæ found at Hill Station during the year were as follows :—

Culex	21
Stegomyia	33
Anopheles	Nil
	54

160. 120 trees were felled during the year. 30 trees contained holes and were attended to.

161. A committee with terms of reference to enquire into and advise on the stumping, re-grassing and planting of trees at Hill Station has been formed. A sum of £100 has been set aside for this purpose.

162. The Forestry Department is responsible for the tending of the young trees. These trees will be periodically examined by the Health Branch for any cracks and fissures and dealt with accordingly. Large bushing gangs were engaged throughout the rainy season. The permanent gang of scavengers carry out conservancy work, collect refuse, sweep the streets and drains, clean unoccupied compounds and pay attention to the falls of earth drains.

163. A new Otway Pit on improved lines was constructed. This pit is working satisfactorily and no nuisance has been observed. The incinerator is still in use. Non-consumable refuse is removed by lorry to the Cline Town Refuse Disposal Siding weekly for final disposal.

Wilberforce Barracks.

164. The scheme of rebuilding continues. A new Otway Pit has been constructed near the old one. New latrines have been planned and will be constructed in 1937.

165. An intensive mosquito campaign was carried out in the Barracks and Wilberforce. The number of larvæ found in the village of Wilberforce was high.

City Council.

166. It will be some time before it will be desirable for the City Council to take over the routine health work of this City; a report on these lines has been submitted.

167. The liaison which is being established is still slender, but at the Health Committee meetings held once monthly, elected Councillors have shown more interest in matters pertaining to health. Their suggestions are carefully and sympathetically considered and for the present this link is the only one which can be maintained between the Medical Officer (Health) and the City Rate-payers.

168. The Waterworks Engineer's report is attached. It is hoped that there will be a considerable increase in the annual water supply in the near future.

Freetown Municipality Building Scheme.

169. Eight buildings were erected during the year at the cost of £3,161 17*s.* 1*d.* The building scheme has been held up temporarily for want of funds, but Government is now considering an application from the City Council for a further loan to enable the scheme to be continued.

E. H. TAYLOR-CUMMINGS,
Medical Officer (Health).

REPORT ON THE HEALTH AND BABY WEEK, 1936

by

Dr. W. Allan, Medical Officer (Health).

I have the honour to submit the following account of the 1936 Health and Baby Week.

2. As in 1935, it was considered an advantage to arrange the week for the month of March, as there is little chance of rain interfering with the functions, and in that month the Education Department can best co-operate. Accordingly the week was arranged to commence on Sunday the 1st March, finishing on Saturday the 7th of March.

3. Organisation of this Health Week began in December with the drawing up of a suitable programme, and we decided that the programme drawn up for 1935, which was unavoidably upset by the occurrence of yellow fever cases, could not be improved upon. Our first step therefore, was to send a circular letter to churches of all denominations, asking the ministers and preachers to draw attention to the benefits of Health Week, and to deliver a special address to their congregations on Sunday the 1st March. Leaflets also were distributed to the members of the churches.

4. The Honourable Director of Education was next approached with a view to obtaining the assistance of teachers and managers. An Essay was arranged for scholars of different ages, and a new departure was made by offering prizes to school teachers for an Essay on "Ideas for improving health matters in Freetown." It was also arranged that on Monday the 2nd March, a demonstration of the methods of disinfection at the port should be given to all teachers and managers who cared to attend; about 100 appeared and all showed a lively interest.

5. On Tuesday the 3rd March, a special address to teachers was delivered by the Medical Officer (Health) and 150 teachers attended.

6. In previous years little or no attempt had been made to gain the active co-operation of citizens, and to remedy this, an invitation to co-operate was sent to the Rate-payers Association of the East, Central and West Wards of the City. The response was gratifying, and the West Ward Rate-payers held a special health meeting on the afternoon of the 2nd March at which a lecture was delivered by the Rev. S. B. A. Campbell on Hygiene and Sanitation, and at which the Medical Officer (Health) acted as Chairman. The meeting was well attended and great enthusiasm was shown. The Association also sent a bell-ringer around the town announcing Health and Baby Week to the people.

7. On Wednesday the 4th March, there was a mass meeting of citizens at the Wilberforce Memorial Hall, which was kindly loaned to us by the City Council for this occasion. The Honourable Director of Medical Services delivered an address on Health Week and we were successful in obtaining the services of the Honourable Colonial Secretary, Honourable J. A. Songo Davies, and Mr. T. E. Nelson-Williams as speakers. The meeting had been well advertised by means of posters, pamphlets, notices in the newspapers, letters to churches, the Education Department, and the Rate-payers Associations; the Muslim community was specially invited, and as a result of these efforts, the Hall was packed. A most successful meeting was held.

8. On Thursday there was a tour round the Connaught Hospital—special invitations were sent to prominent citizens, but unfortunately only four gentlemen and one lady were present. The matron was kind enough to assist by showing them round the various parts of the hospital, and an encouraging interest was shown by each person present.

9. Friday was set aside as a special Cleanliness Day throughout the town. The citizens were asked to have a special clean up of their house, their compound, and the general surrounds of the City, and our fleet of lorries worked overtime in clearing all the rubbish away. As usual, the day was well advertised by means of posters and pamphlets.

10. During the week, Drs. Wright and Reffell were busily engaged in sorting out the best babies from each section to go forward to the competition proper. Rules had to be drawn up and printed, and different coloured cards issued to the mothers of the different sections.

11. On Saturday, the last day of the Health and Baby Week, the Baby Show was held at the Victoria Park.

12. A few details as to the various things necessary for the success of Baby Day will not be out of place.

13. Several hundred mothers have to be catered for; they are supplied with tea, sandwiches, lemonade, biscuits, etc., and this year Mr. Shaw, Dresser, looked after the arrangements under the direction of the Medical Officer (Health). Nurses were loaned from the Princess Christian Mission Hospital and the Connaught Hospital. A squad of policemen to police the Park was arranged. Bunting was loaned from the Prince of Wales School. Palm thatching had to be put around the Park as a shade, and a palm barrie was a shelter for the babies while judging was proceeding.

14. Judges had to be arranged for, and I have to record our thanks to Drs. Renner, Pratt and Renner Dove, who so kindly gave up their time to spend 2½ hours judging on a hot afternoon. The Band of the Royal West African Frontier Force was engaged by kind permission of the Officer Commanding.

15. By 4 p.m. the judging was finished and the prize-winning babies put into order. The essays from the schools having been examined during the week, the prizes to scholars are also awarded on Baby Show Day.

16. Invitations to attend the Baby Show are sent to all European residents and a fair number attended, including His Excellency, Lady Moore, the Honourable Colonial Secretary and Mrs. H. R. R. Blood, and the Honourable Director of Medical Services and Mrs. P. D. Oakley; Lady Moore presented the prizes to the winners, and thus ended a highly successful Health and Baby Week.

W. ALLAN,
Medical Officer (Health).

MEDICAL OFFICER (HEALTH)'S OFFICE,
FREETOWN, SIERRA LEONE,
25th March, 1936.

170. During the year the Medical Officers' stations were increased by one and 17 Medical Officers, 40 Dispensers and 42 Sanitary Inspectors carry out the routine sanitary duties in the remainder of the Colony and in the Protectorate.

171. Sanitation carried under the Protectorate Mining Benefits Fund has proceeded in a satisfactory manner. In future years it is proposed to concentrate on the larger towns, and those places requiring immediate attention, so that a definite scheme of sanitation can be approved and carried out in preference to the haphazard erection of temporary sanitary structures in a great number of villages. In addition to these major operations under the Mining Benefits Fund, the erection of temporary sanitary structures in certain villages will be carried out by the Sanitary Inspectors.

(*b*) EPIDEMIC DISEASES.*

172. *Smallpox and Vaccination.*—The outbreak of smallpox which commenced in 1932 has shown further signs of decreasing in 1936. As in 1935, an undetected case of smallpox was introduced from the Protectorate and gave rise to a small localised outbreak in Freetown. This outbreak was circumscribed and quickly stamped out.

* The disparity of the Medical and Health figures for the following diseases is explained partly by laxity of notification from out-stations, notification by private practitioners to the Health Office only, and partly by registration of causes of death (not medically certified) by lay informants.

173. A table is subjoined, showing the number of cases, deaths, and vaccinations for 1936. The figures in 1935 were 1,509, 259 and 44,309 :—

AREA.	Number of Cases Discovered.	Number of Deaths.	Number of Vaccinations.
COLONY DISTRICT :			
Freetown	29	8	8,448
Headquarters Judicial	26	1	1,501
Sherbro	4	—	3,114
PROTECTORATE DISTRICTS :			
NORTHERN PROVINCE :			
Port Loko	5	—	3,033
Karene	57	13	806
Bombali	39	—	1,736
Koinadugu	6	—	—
SOUTHERN PROVINCE :			
Kailahun	57	6	1,951
Kenema	15	1	1,766
Bo	14	—	3,657
Moyamba	103	16	2,115
Pujehun	9	1	1,764
Bonthe	27	5	—
	391	51	30,082

Of the 29 cases shown above against Freetown, 12 were imported.

(*c*) HELMINTHIC DISEASES.

174. Helminthic disease is widespread over the whole country of Sierra Leone and the figures for 1936 show an increase over those for 1935 :—

Disease.	1935.	1936.
Ascariasis	5,394	6,580
Ankylostomiasis	172	403
Schistosomiasis	65	98
Tæniasis	353	243

2.—GENERAL MEASURES OF SANITATION.

175. *Night-soil Disposal.*—No new measures have been introduced during 1936 and conditions remain the same as in 1935.

176. The introduction of water-borne sewage is being considered and a report will be submitted to Government in due course.

177. The present system of emptying the contents of the pans into the sea is primitive and objectionable. The bungalows of all Europeans are equipped with pails and these are serviced daily. At Hill Station the contents are emptied into fly-trapped Otway disposal pits.

178. In the Protectorate pit latrines are universal and great progress has been made in the digging of latrines in the smaller villages which previously had no sanitation.

179. *Refuse Disposal.*—The scheme for refuse disposal in Freetown commenced in 1931 and continues to work satisfactorily. The accommodation at the Railway siding has been increased to enable the Health Branch to cope with greater quantities.

180. In the Protectorate the bush type incinerators are growing in favour and are proving satisfactory. A great many of these incinerators have been erected from the Mining Benefits Fund.

181. *Drainage and other Sanitary Improvements.*—The following extracts are taken from the current reports of the Public Works Department and the Waterworks Engineer :—

182. *Maintenance, Repairs and Improvements of Trunk Roads, Bridges and Side Drains.*—Provision in Estimates, £834. Concrete drains were laid to either side of Regent Road from the junction of Howe Street and Frederick Street down to corner of Kissy Road. This has effected a great improvement as formerly the drains were earth ditches.

183. *Maintenance, Repairs and Improvements of Streets, Bridges and Side Drains.*—Provision in Estimates, £2,219. The following streets were made up, bitumen surfaced and provided with concrete side drains :—

Patton Street

Malta Street

Ambrose Street

Third Street.

184. *Maintenance and Repairs of Sanitary Structures.*—Provision in Estimates, £120. All dust-bins, latrines and urinals were overhauled and repaired during the year and, on the conclusion of the rains, were whitewashed and all steelwork coated with Tarkecem.

185. *Maintenance, Repairs and Improvement of Drains and Minor Health Improvements.*—Provision in Estimates, £300. General repairs were effected to all drains and outfalls throughout the year. New concrete drains were laid on the north side of Oxford Street between George and Charlotte Streets. A small street by Truscott Street discharging into Nicols Brook was converted into a masonry channel to obviate mosquito breeding and the flooding of adjoining houses. Major alteration was made to the culvert at the junction of Oxford and Howe Streets with the result that the flooding which formerly had constantly taken place at the point during the rains was entirely eradicated.

186. *Maintenance of Hill Station Water Supply.*—Provision in Estimates, £308. The repairs effected to the concrete reservoir in 1935 proved entirely satisfactory and during the past year this structure showed itself capable of holding water with no apparent leakage loss.

187. This combined with a prompt response by the Hill Station residents to an appeal to economise in the use of water at the end of the dry season, enabled the supply to remain uncurtailed throughout the year.

188. *Public Works Extraordinary, Drainage at King Tom Police Barracks.*—Owing to the almost level site the King Tom Police Barracks have suffered in the past from standing water and flooding during each rainy season. To obviate this a drainage scheme was put in hand during the year consisting of the laying out of four lines of concrete channels along the whole length of the barracks—a total of 887 yards channels. These drains discharge into the main outfall which was regarded and deepened to suit. The results during the past rainy season were very satisfactory.

189. *Canalization of Streams.*—Provision in Estimates, £4,857. The year's programme consisted of canalization of Samba Water and the drainage of the upper section of Wellington Street. Samba Water which was formerly a small and evil smelling stream running from Tower Hill to Joaque Bridge has been converted to a brick-lined channel from Soldier Street downwards. The top section from Soldier Street to Fort Street has been constructed as a V section drain with a glazed earthenware invert arranged in steps to reduce the velocity of the water. The main channel is constructed of pressed down engineering bricks laid on a concrete foundation, the cross section of the channel being 3′ 0″ × 1′ 10½″ at its bottom end near Joaque Bridge and 2′ 4½″ × 1′ 10½″ between Soldier Street and the junction of Upper Waterloo Street and Waterloo Street. A subsidiary channel, also brick-lined was constructed from Upper Brook Street to Samba Water at the junction of Upper Waterloo Street and Waterloo Street.

190. The lower sections of the Samba Water Canal were completed before the advent of the rains and were found to function in a satisfactory manner.

191. The upper section of Wellington Street was drained at either side with ovoid concrete channels and the road made up to the uniform width and camber.

192. The finished work, which is to a high standard, reflects credit upon Mr. M. S. Roberts, African Foreman of Works who, owing to shortage of staff was in sole charge of the work under the direction of the Provincial Engineer (Colony).

Freetown Water Supplies.

193. The maintenance of the works was carried on during the year and the prevention of the waste diligently attended.

194. *Consumption.*—The total consumption of water during the year amounted to 185,066,000 gallons or an average of 505,644 gallons per diem. Of this amount 5,731,000 gallons were supplied to shipping and 2,738,000 for other non-domestic purposes, leaving the purely domestic consumption at 176,597,000 gallons, an average daily consumption of 482,505 gallons, i.e., 8·77 gallons per head per diem for the population of 55,000

195. *Public Standposts.*—An extensive programme of erection of new public standposts was carried out this year, no fewer than 16 being erected as follows: 3 in the Central Ward, 6 in the Eastern and 7 in the Western. There are at present 260 public standposts.

196. *Private Services.*—Eighteen new private services were laid during the year. This brings the number up to 535.

197. *Distributing Mains and Hydrants.*—960 yards of 8″, 7″, and 6″ leading mains were laid from the Service Reservoir on to the junction of Circular Road and Regent Road. This has improved the supply and the pressure on the mains at Regent Road, Circular Road, Upper Sackville Street and adjacent areas, and remedied the inconvenience usually experienced in these portions of the town during the dry season. Four fire hydrants were also installed in connexion with this main bringing up the number of hydrants in the City to 410.

198. *Preservating Treatment of Steel Mains, Lumley Valley.*—1,844 yards of 6½″ steel supply mains in the Lumley Valley were scraped and treated with bitumastic solution and enamel. This should ward off corrosion and materially lengthen the life of the mains.

199. *Shortage of Water Supply.*—The periodic shortage of the supply during the dry season lasted this year from the 19th March to the 11th of May—54 days, during which the City was placed on a restricted supply.

200. *Pumping Operations.*—Pumping operations lasted from the 4th of March to the 5th of May, a period of 79 days.

201. *Freetown Water Supply Extensions.*—The question of augmenting the supply to prevent the recurring shortage in the dry season has been engaging the attention of the water authority for some time past and Council, with the approval of Government and the Secretary of State for the Colonies has secured the services of Captain Wilson Brown, O.B.E., M.Inst., C.E., Honourable Director of Public Works as Consulting Engineer, to go thoroughly into the question and advise Council thereon. Captain Wilson Brown has begun preliminary investigations in the matter and there is every reason to hope that at no distant date these periodic shortage will become a thing of the past.

W. S. COLE,
Waterworks Engineer.

202. Water supplies in the Protectorate are still obtained from streams running in the neighbourhood of villages. In the absence of streams reliance is placed in wells which are surface wells and usually devoid of a protecting cover or any sanitary method of raising the water.

203. During the year steps have been taken to put forward plans for a pipe-borne water supply in certain towns in the Protectorate. Elsewhere in the Protectorate improvement is taken place, the wells being dug in a proper manner and a requisite cover supplied in order to prevent them becoming contaminated.

School Hygiene.

204. In the absence of a School Medical Officer it is impossible to carry out the routine medical school inspection; but, where occasion demanded, local inspections have been carried out.

205. The elementary principles of hygiene are taught in the schools, both in the Colony and the Protectorate. It is satisfactory to report some improvement in the sanitary conditions of the schools.

Labour Conditions.

206. Owing to the increased activity in the mining areas more and more labour is employed by these concerns, and at times it has been very difficult to maintain the necessary number of sanitary labourers. Mining camps are inspected by sanitary officers and their recommendations have in general been carried out.

Housing and Town Planning.

207. In so far as Freetown is concerned, the conditions are similar to those reported in 1935, i.e., the Health Branch of the Medical Department does not enter into the building activities in Freetown which are carried out under the Freetown Improvement Ordinance in which no provision is made for control by the Medical Department.

208. In the Protectorate a more sensible arrangement exists in those areas which have been declared Health Areas under the Public Health (Protectorate) Ordinance, or Labour Health Areas under the Labour Ordinance, 1934. In all these cases, buildings and lay-outs are subject to approval of the Medical Department, and steady progress is being made.

209. Elsewhere all new buildings are subject to approval by the district Medical Officer acting in his capacity of Medical Officer (Health). Though this principle is slow in effecting any markedly noticeable improvement, it must, if steadily followed, inevitably lead to a gradual and permanent improvement in Protectorate towns.

Food in Relation to Health and Disease.

210. This subject has already been fully dealt with in the report submitted by the Medical Officer (Health).

211. An electrical stunning device has been in operation during the year and has proved satisfactory.

B—Measures taken to spread the knowledge of Hygiene and Sanitation.

212. Instruction in the elementary principle of personal and public hygiene continues in the schools, while the practical effect of these principles is demonstrated by the Sanitary Inspectors, Health Visitors and Midwives in the daily execution of their duties.

213. During Health Week propaganda is intensified by means of posters, pamphlets, handbills, lectures and health talks over the radio. The Baby Show was again a great success and was attended by a greater number of entrants than in any previous year.

214. During 1936, Health Week and the Baby Show were inaugurated in Medical Officers' stations in the Protectorate. These Health Weeks were a very great success and it is now proposed to come into line with Freetown and make them an annual event.

C—Training of Sanitary Personnel.

215. In the absence of any new recruits only refresher courses were given to the existing Sanitary Inspectors all of whom had already passed their examination. The practice of bringing into headquarters those Sanitary Inspectors who had been long in out-stations continued during the year with a consequent improvement in the general efficiency.

V—Port Health Work.

216. This has already been reported. The remarks under this head will be found in the appropriate section in the report of the Medical Officer (Health), Freetown.

VI—Maternity and Child Welfare.

217. Good progress has been made during the year under review in both Maternity and Child Welfare in spite of the fact that there has been no increase in accommodation. 607 cases were admitted to the Maternity Ward of the Connaught Hospital of which 402 gave birth, whereas in 1935 the figures were 554 and 379 respectively. There has been a small but, nevertheless, very welcome decrease in the figures for maternal mortality. The mortality rate per 1,000 live-births for the last three years are 15·6, 11.78 and 9·7 which show a steady and satisfactory decrease.

218. A new Maternity Training Centre is to be erected and it is hoped that this Hospital will be in full operation early in 1939. The proposed hospital is to be on two floors—Maternity on the top floor and the Ante and Post-Natal and Infant Clinics on the ground floor. Accommodation is to be provided for forty patients including four private wards. It is confidently hoped that, with the increased accommodation, far better results will be obtained in the future.

219. The scheme of voluntary training for midwives, which was introduced two years ago, has made satisfactory progress. Two ladies have already obtained the local C.M.B. and six more are still in training, two of whom will be eligible to sit for the examination in June, 1937.

220. The figures for infantile mortality show a decrease of 17 per 1000 live-births, the largest decrease recorded for the last four years. During 1936 active steps were taken to educate the masses in the correct feeding of young children by means of pamphlets and broadcast talks. Health Visitors have also been teaching the correct method from door to door during their routine visits. All uncertified deaths of children under one year have been strictly investigated, and, where any doubt existed, post mortem examinations carried out. The majority of the autopsies performed revealed that injudicious feeding had been the cause of death. In one case of a child of five months old the stomach was found to be distended with lumps of undigested Fu Fu and green peppers. It is interesting to note that, of the total number of children who died before they reached the age of one year, 74·5 per cent. died during the first three months of life. The work of teaching midwifery to illiterate women in the Protectorate has proceeded satisfactorily. One of the main objects of the Maternity Training Centre will be to train women from the Protectorate so that, when they have obtained the local C.M.B. they may return to their homes to work under the various Native Administrations.

221. Infant Clinics, also Ante and Post-Natal Clinics, have been inaugurated at every Medical Officer's station in the Protectorate during the year. The results have been very gratifying and the movement has been very popular with the Paramount Chiefs.

222. Maternity and Child Welfare is also carried out at the various mission hospitals, and very good work has been done. The work of the Princess Christian Mission Hospital in this respect has continued in a very satisfactory manner. The authorities of this hospital have opened a clinic at Yongro on the Bullom Shore, under the care of Sister Strickland. This clinic fills a much needed want and the work is making good progress.

VII—Hospitals and Dispensaries.

223. (*a*) *Connaught Hospital.*—Although the actual number of new cases shows a slight decrease, the standard of the work carried out at this hospital has been most satisfactory. The surgical wards of the hospital have been well filled and there is a long waiting list for admission. The accommodation for maternity has been taxed to its very utmost and it is extremely doubtful whether any more cases could have been admitted. As has already been stated in the previous section, a new Maternity Hospital is to be erected and when completed the present maternity ward will be absorbed for general use in the hospital.

224. The cost per patient is 9½*d.* per diem which compares with 7¼*d.* in 1935. This increase is due to the higher prices obtaining.

225. The X-ray installation, which has been in continual use since 1927, is now out of date and it is to be replaced in 1937 by the most modern type.

226. The pathological work of the Colony is under the direction of Professor R. M. Gordon of the Sir Alfred Jones Research Laboratory who is Consulting Pathologist to the Sierra Leone Government. The report of the Pathologist incorporates all work performed in the Connaught Hospital Laboratory, and also that carried out by Professor Gordon and his assistants at the Sir Alfred Jones Research Laboratory.

227. The following table shows the figures of in-patients and maternity cases admitted to the Connaught Hospital during the past ten years:—

Year.	Total In-patients.	Maternity In-patients.	Remarks.
1927	2,046	301	
1928	1,945	311	
1929	2,228	353	
1930	2,383	363	New surgical block—two wards of fourteen beds and four cubicles.
1931	2,335	357	
1932	2,628	344	New children's ward—ten beds and cubicles.
1933	2,268	382	
1934	2,464	501	
1935	2,672	554	
1936	2,549	607	

228. The following table gives the comparative figures of out-patient attendances at the Connaught Hospital during the past ten years :—

———	1927.	1928.	1929.	1930.	1931.	1932.	1933.	1934.	1935.	1936.
New cases	14,780	13,864	14,265	14,276	10,583	12,019	17,313	17,155	18,635	18,193
Subsequent attendances ...	34,780	47,040	59,441	41,722	50,059	55,198	50,147	105,511	135,094	136,896
Total	49,560	60,904	73,706	55,998	60,642	67,217	67,460	122,666	153,729	155,089

229. (*b*) *European Hospital.*—The accommodation has been proved to be incapable of meeting the demands made upon it and on two occasions during the year it was not possible to admit any more cases. A new hospital is to be erected on the same site as the existing hospital, and it is hoped that it will be completed early in 1938. The accommodation will provide for 20 patients as against 14 of the present hospital.

230. The cost per patient during 1936 was 5*s*. 6½*d*. as against 6*s*. 2¼*d*. in 1935

231. During 1936, 173 patients were admitted as against 141 in 1935. Of these 173 cases, 53 were official and 120 non-official. The large increase is accounted for by the greater number of patients admitted from ships and the various mining enterprises. There has been only one death in the hospital during 1936. This death occurred in a non-official who was admitted *in extremis* suffering from non-operable carcinoma.

232. (*c*) *Other Hospitals.*—One more permanent Protectorate type hospital has been erected during the year. This hospital has been built at Port Loko in order to replace the old hospital which was in a dangerous condition of repair. There are now four Protectorate type hospitals in commission in the Protectorate, and this number will be increased to five in 1937 by the erection of a hospital at Kailahun. The figures of attendances are as follows :—

——	Port Loko.	Makeni.	Bo.	Moyamba.
In-patients	103	298	424	222
Out-patients :				
New cases	3,360	4,583	3,586	2,317
Subsequent attendances	18,253	14,628	16,328	3,658

233. (*d*) *Mission Hospitals Subsidised by Government.*—There are four missions subsidised by Government. One operating in the Colony, namely, the Princess Christian Mission Hospital, and three in the Protectorate, namely, the American Wesleyan Mission, the United Brethren in Christ Mission, and the Methodist Mission. These are stationed respectively at Kamakwie, in the Northern Province, and Jaiama and Segbwema, in the Southern Province.

234. The work of these missions has increased in scope and they are carrying out very good work as evidenced by the table showing the number of patients treated at the various hospitals. In addition, all these missions performed very good work in maternity and child welfare, and their clinics are increasing year by year :—

Hospital.	Out-patients.	In-patients.	Subsequent Attendances.
Princess Christian Mission	359	2,493	6,139
Methodist Mission	611	5,574	15,386
American Wesleyan Mission	257	5,057	16,469
United Brethren in Christ Mission	54	8,821	11,530

235. (*e*) *Government Dispensaries.*—There are 8 dispensaries established in the Colony and 14 in the Protectorate. Two new dispensaries were opened in the Protectorate in 1936—one at Mabonto, in the new Tonkolili District, and the other at Koidu in the Kono District. The scope of these dispensaries, which are under the care of senior dispensers, has been increased during the year and all dispensers in charge of these dispensaries have been trained to administer intramuscular injections of B.S.P.T. in the treatment of yaws. This procedure has been much appreciated. These dispensaries are inspected frequently by the Medical Officers of the districts.

VIII—Meteorology.

237. *Rainfall.*—The rainfall for the year 1936 at Freetown (Tower Hill) was 144·40 inches as compared with 199·05 inches in 1935.

238. August was the heaviest month with 27·45 inches and the highest rainfall in any one day was 4·50 inches on the 20th of November.

239. The lowest temperature recorded at the Tower Hill Observatory was 67 degrees in the shade on the 30th June.

240. The highest temperature recorded was 95 degrees in the shade on the 21st March.

241. The highest minimum was 79 degrees on the 24th of February and on the 8th of April.

242. The lowest maximum was 74 degrees on the 10th of August.

243. The rainfall per month is as follows :—

January	nil
February	0·02
March	1·03
April	6·81
May	17·87
June	18·28
July	25·03
August	27·45
September	26·43
October	10·09
November	10·91
December	0·48
Total	144·40

244. Hill Station reported a rainfall of 169·09 inches as compared with 184·54 inches in 1935. The heaviest month was August. The maximum precipitation in any one day was 7·82 inches on 10th September.

IX—Scientific.

CONNAUGHT HOSPITAL LABORATORY.

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245. Dr. E. A. Renner, Pathologist (Sierra Leone) was in charge of the Laboratory at the Connaught Hospital throughout the year until 10th November, when Dr. Athol J. Johnson was the Medical Officer-in-charge of the laboratory. As in the previous year the staffs of the Sir Alfred Lewis Jones Research Laboratory and of the Connaught Hospital Laboratory have worked as a Pathological Unit.

I—BACTERIOLOGICAL EXAMINATIONS.

246. During the year, 121 cultures were made from various sources. These may be classified as follows :—

(*i*) *Cultures of Faeces for Organisms of the Enteric and Dysentery Groups :*

	European.	African.	Total.
No pathogenic organism isolated	6	17	23
Bact. flexneri	—	4	4
Bact. alkaligenes	—	1	1
Bact. morgani	1	—	1
Bact. typhosum	—	1	1
Salmonella group (unclassified)	1	—	1
Total	8	23	31

	European.	African.	Total.
(*ii*) *Blood cultures :*			
Sterile	8	21	29
B. typhosum	1	2	3
Total	9	23	32

	European.	African.	Total.
(*iii*) *Cultures from boils, ganglions, joints, pleural fluids, etc.* Positive 7 ; only staphylococci isolated.	10	10	20
(*iv*) *Cerebro-spinal fluid cultures :* All proved sterile.	1	3	4
(*v*) *Urine cultures :* Only one was sterile, the remainder yielded growths of staphylococci and, or, *B. coli*.	10	1	11
(*vi*) *Throat swabs for culture :* *C. diphtheriae* was obtained in the case of one European, and *S. haemolyticus* in an African	8	6	14
(*vii*) *Cultures for the presence of fungi :* Only one case was sent for examination. It proved negative.	1	—	1
(*viii*) *Water analyses :* (These included mineral waters).	—	—	8
(*ix*) *Dark ground examination for the presence of T. pallidum :*			
Negative	7	47	54
Positive	4	4	8
As is shewn, 8 of these gave positive results.			
(*x*) *Dark ground examination of urine for the presence of L. icterohaemorrhagiae :* Two urines examined with negative results.			
(*xi*) *Vaccines :* Three vaccines, two of staphylococci and one of streptococci, were prepared during the year.			

II—SEROLOGICAL EXAMINATIONS.

247. *Kahn Tests.*—723 tests were performed during the year with the following results :—

	European.	African.	Total.
Positive	9	347	356
Doubtful	2	21	23
Negative	44	300	344
Total	55	668	723

248. *Widals.*—The total number of agglutinations carried out for the enteric group was 107, these being performed on 73 cases. *B. typhosum* infection was diagnosed in 13 cases (3 Europeans and 10 Africans). In addition, as can be seen from the bacteriological examinations, *B. typhosum* was isolated from the blood or fæces of 1 European and 3 Africans. The total number of *B. typhosum* infection observed during the period was therefore 17; no paratyphoid infection was recorded. This is an increase of 6 over the previous year.

249. *Weil-Felix.*—The total number of agglutinations carried out was 97 on 67 individuals (9 Europeans and 58 Africans). One European and two Africans gave positive results, the European case being almost certainly a laboratory infection. Two more Africans gave a doubtful positive, the observation period being insufficient for diagnosis. The three cases of tropical typhus which were diagnosed were all of the OX19 type. During the previous year 30 tests were carried out on 22 individuals, yielding one positive result and one doubtful reaction.

III—HISTOLOGICAL EXAMINATIONS.

250. A number of tissue, varying from one to six per case, were submitted from 113 sources during the period under review. Twenty-eight of these were in the nature of new growths and their site and character are given below. All but one were Africans; the European case has been marked wth an asterisk.

Site.	Non-malignant.	Doubtfully malignant.	Malignant.	
			Carcinoma.	Sarcoma.
Skin	1 Papilloma 1 Fibroma	*Capillary Hæmangioma	4 Epitheliomas	1 Malanotic Sarcoma
Subcutaneous tissue and muscle	2 Fibromas	—	1 Adenocarcinoma	5 Sarcoma
Liver	—	—	1 Alveolar Carcinoma	—
Bone	1 Epulis	1 Adamantinoma	1 Myeloma	—
Breast	2 Fibro adenoma	—	1 Carcinoma simplex	—
Ovary	2 Retention cysts	—	—	—
Uterus	—	1 Hydatiform mole	1 Epidermal Carcinoma	—
Parotid	—	—	1 Mixed Carcinoma	—
Total	9	3	10	6

251. In addition 34 tissues removed at operation were submitted for histological report; 26 of these were found to be granulomata (3 syphylitic, or yaws; 5 *T.B.*; 2 due to schistosomiasis, and 16 due to pyogenic infection), while in the remainder the cause was doubtful. The remaining specimens submitted were mainly from the autopsies which follow.

IV—AUTOPSIES.

252. Eighty-one autopsies were performed during the year.

Accidents		8
Drowning	2	
Multiple fracture	2	
Fracture of base of skull	1	
Electric shock	1	
Rupture of liver and spleen	1	
Rupture of spleen	1	
Lobar pneumonia		8
Broncho-pneumonia		5
Pericarditis		2
Rupture of aortic aneurysm		5
Aneurysm of aorta and myocardial degeneration		1
Cardiac failure		1
Aortic incompetence		1
Sub-acute nephritis		2
Uræmia		2
Acute nephritis		1

Tetanus				2
Fatty degeneration of liver (cause unknown)				1
Cirrhosis of liver				1
Carcinoma of liver				2
Abcess of liver				1
Typhoid fever				1
Tuberculosis				12
Pulmonary	8			
Spine	1			
Meningitis	1			
Enteritis	2			
Infantile convulsion				1
Atelectasis of the lungs				2
Cerebral malaria				1
Avitaminosis				1
Duodenal ulcer and hæmorrhage				1
Ante-partum hæmorrhage				1
Ruptured uterus				1
Acute gastro-enteritis				3
Appendicitis				5
Strangulated inguinal hernia				3
Intestinal obstruction—twisted mesentery				1
Toxæmia, following ulcer				1
Pyosalphynx				1
Sub-dural hæmorrhage				1
Cerebellar hæmorrhage				1
Cause unknown				1

V—BIOCHEMICAL EXAMINATIONS.

253. Eighteen examinations were carried out.

	European.	African.	Total.
Urea concentration test	—	4	4
Identification of composition of a tablet? poison	—	—	1
Analysis of bottled fruit juice	—	—	2
Nature of ureteral calculus	—	1	1
Nature of hairs from brush	—	—	1
Glucose tolerance test	—	1	1
Van den bergh's reaction	1	7	8

VI—VETERINARY.

254. These, for the most part consisted of autopsies on animals suspected of rabies. Twenty brains from animals (seven cats and thirteen dogs) were sectioned. Negri bodies were demonstrated in thirteen of these animals (one cat and twelve dogs).

VII—EXAMINATION OF ANIMALS FOR PLAGUE.

255. Total number of rats trapped during 1936 was 6,892. The total number of animals dissected and examined for plague during the year was 4,644 and consisted of the following species :—

R. rattus	3,573
R. norvegicus	759
M. musculus	287
Crocidura occidentalis	25
Total	4,644

256. Suspicious cases were cultured and, if necessary, animal inoculations carried out. *B. pestis* was not encountered during the examination. For the purpose of the present report, the following figures may be quoted from the rat investigation which will form the subject of a special report. A total of 712 live rats were examined for ecto-parasites, these yielded 2,133 fleas of which some 83·5 per cent. were *X. brasiliensis* and 16·5 per cent. *X. cheopis*. The flea-rate per rat for the year averaged three.

VIII—RABIES.

257. As stated above negri bodies were demonstrated in thirteen animals. In view of the presence of rabies all dogs which had either bitten persons or which appeared to be behaving in any peculiar manner, were brought to the laboratory by the police for inspection. Sixty-two animals were examined, and of these animals, post-mortems were held on twenty-one which had died or which appeared ill and were killed.

258. In June a supply of anti-rabic vaccine was obtained and owners of dogs and cats were advised to have their animals inoculated against rabies and 117 animals were inoculated. This cannot be regarded as a satisfactory response by the public.

IX—GENERAL PATHOLOGICAL EXAMINATIONS.

259. Various small collections of insects, mainly mosquitoes, were received and identified.

X—MISCELLANEOUS EXAMINATIONS, MOSTLY SMEARS.

(1) Skin scrapings for fungi :—4 Europeans, 1 African. Four showed presence of mycelia, species not identified.

(2) Throat swabs :—2 Europeans, 8 Africans. All negative for K.L.B. Two Africans showed *T. vincenti*.

(3) Stained smears from penile sore :—21 Africans, 1 European. One European and 19 Africans—negative. One African—Ducrey's bacillius. One African—Diptheroids.

(4) Smears for general bacteriology :—Mostly from boils, abscesses, etc. Six Africans and four Europeans. Staphylococci and streptococci only noted.

(5) C.S.F. :—7 all Africans. 6—negative; 1—*N. meningitidis* present.

(6) Fluid from joint :—1 African. Streptococci present.

(7) Pleural effusions, empyemas, etc. :—6 All Africans. Nothing significant.

(8) Gland puncture fluid :—1 European. No organism found.

(9) Smears from cattle for *B. anthracis* :—5. Four were negative and the remaining one showed the presence of bacilli which closely resembled *B. anthracis*.

(10) Fluid from a nodule showed the presence of embryo of *O. volulus*.

TABLE I.
EXAMINATION OF BLOOD FILMS FOR PARASITES.

———	No. of Examinations.	Sub-tertian.	Benign tertian.	Quartan.	Sub-tertian and Quartan.	Benign tertian and Quartan.	Benign tertian and Sub-tertian.	Trypanosomes.	Microfilaria.	Negative.
Europeans	356	61	2	7	4	0	1	0	0	281
Africans	3,105	875	1	229	127	1	0	1	0	1,871
Total	3,461	936	3	236	131	1	1	1	0	2,152

TABLE II.
EXAMINATION OF FÆCES.

———	No. of Examinations.	Cestode.	Ankylostomes.	Ascaris.	T. trichuris.	Strongyloids.	E. hystolytica free	E. hystolytica cysts.	E. coli free	E. coli cysts.	Giardia cysts.	S. mansoni	Dicrocoelium.	Negative.
Europeans ...	99	3	7	0	2	0	1	0	0	0	0	0	1	85
Africans ...	1,436	22	328	229	125	116	43	17	9	36	16	2	0	493
Total ...	1,535	25	335	229	127	116	44	17	9	36	16	2	1	578

TABLE III.
EXAMINATION OF URINE.

Europeans	118
Africans	585
Total ...	703

260. These examinations were routine tests for abnormal constitutents and on occasion for nature of the deposit.

TABLE IV.
BLOOD EXAMINATIONS.

——	No. of Examinations.	Total erythrocyte counts.	Total leucocyte counts.	Differential leucocyte counts.	Haemoglobin investigations.	Special blood investigations.	Grouping of blood Donor.	Bleeding time.
Europeans ...	26	8	11	18	19	0	1	0
Africans	68	23	29	23	29	1	6	1
Total ...	94	31	40	41	48	1	7	1

TABLE V.
SPUTUM EXAMINATIONS.

——	Number of Examinations.	Acid fast Bacilli.	Negative.
Europeans	8	0	8
Africans	329	79	250
Total	337	79	258

TABLE VI.
URETHRAL AND PROSTATE SMEARS FOR GONOCOCCI.

——	Number of Examinations.	Positive.	Negative.
Europeans	26	13	13
Africans	315	155	160
Total	341	168	173

TABLE VII.
SMEARS FOR B. LEPRÆ.

——	Number of Examinations.	Positive.	Negative.
Europeans	0	0	0
Africans	18	3	15
Total	18	3	15

ATHOL J. JOHNSON,
Medical Officer-in-charge, Connaught Hospital Laboratory.

CONNAUGHT HOSPITAL, FREETOWN,
18th February, 1937.

Tables.

I—STAFF.

Medical Staff.

Office.	Name.	Absent on Leave						Remarks.
		From			To			
Director of Medical Services	P. D. Oakley ...		—			—		
Senior Specialist ...	Q. Stewart ...		—			—		
Senior Medical Officer	E. S. Walls		—		15	5	36	
,, ...	C. B. Jennings ...	3	6	36	6	11	36	
Medical Officer ...	A. W. Lewis ...	9	9	36		—		
,, ...	W. Allan	17	6	36	21	11	36	
,, ...	H. R. F. Tweedy ...		—			—		
,, ...	H. Peaston ...		—			—		
,, ...	A. Cathcart ...		—		28	2	36	
	,, ...	19	3	36	22	5	36	
,, ...	A. J. Johnson ...		—		1	5	36	
,, ...	W. M. Quin ...	29	10	36		—		
,, ...	W. R. Williams ...	10	12	36		—		
,, ...	C. A. McComiskey		—			—		
Senior Medical Officer (Sierra Leone) ...	E. J. Wright ...	13	5	36	16	10	36	
Pathologist (Sierra Leone)	E. A. Renner ...	12	11	36		—		
Medical Officer (Sierra	M. C. F. Easmon ...		—			—		
Leone)	E. H. T. Cummings	3	3	36	2	6	36	M.O. (H)
,, ...	W. B. Hughes ...		—			—		
,, ...	W. F. O. Taylor ...		—		1	3	36	
,, ...	M. A. S. Margai ...		—			—		

Health Staff.

Assistant Director of Medical Services (Health)	J. A. A. Duncan, M.C.		—		10	4	36	
Senior Health Officer	Vacant		—			—		
Medical Officer (Health)	Vacant		—			—		
Chief Sanitary Superintendent	G. V. Herd ...	3	6	36	18	12	36	
Sanitary Superintendent	A. E. Wilkinson ...	26	8	36		—		
,, ...	P. Osment ...		—		24	4	36	

Nursing Staff.

Senior Nursing Sister	Miss A. E. Macmaster	1	7	36	21	11	36	
,, ...	Miss G. M. Spencer		—			—		
Nursing Sister ...	Miss L. D. S. McPetrie		—		27	3	36	
,, ...	Miss N. M. Brown ...	1	7	36	27	11	36	
,, ...	Miss H. F. W. Young	26	11	36		—		
,, ...	Miss M. C. Jennings	19	3	36	25	7	36	Transferred to Nigeria 17-10-36.
,, ...	Miss Stewart ...		—			—		
,, ...	Miss Atkins ...		—			—		

African Medical Subordinate Staff.

Office.	Name.	Absent on Leave. From			Absent on Leave. To			Remarks.
Chief Dispenser ...	M. O. Frazer ...	10	6	36	14	9	36	Retired on Pension on 15-9-36.
,, ,, ...	K. A. King ...		—			—		Appointed Chief Dispenser on 15-9-36.
Assistant Chief Dispenser	P. J. John ...		—			—		
Chief Store-keeper ...	P. Q. A John ...		—			—		Appointed Chief Store-keeper on 15-9-36.
First Class Dispenser	M. P. Neville ...	10	4	36	9	6	36	
,, ,,	I. B. Doherty ...		—			—		
,, ,,	T. M. T. Scott ...		—			—		
,, ,,	J. C. May ...		—			—		
,, ,,	S. B. Williams ...		—			—		
,, ,,	E. W. B. Cole ...		—		20	2	36	
,, ,,	G. C. Heroe ...		—			—		
,, ,,	E. F. Smith ...	17	7	36	16	10	36	
,, ,,	W. D. Hedd ...	14	9	36	13	11	36	
Second Class Dispensers	Ten							
Third Class Dispensers	Eighteen							
Laboratory Assistant	C. H. R. Greene ...	4	3	36	23	4	36	
Male Nurses and Apprentices ...	Thirty-three							
Female Nurses and Probationers ...	Twenty-five							
Midwives	Four							

African Health Subordinate Staff.

Senior Health Visitor	Miss O. T. Metzger		—			—		
Health Visitor ...	Mrs. V. S. Macfoy		—			—		
,, ,, ...	Miss A. Macauley		—			—		
Second Grade Sanitary Inspector ...	W. E. J. Corkson ...		—		13	2	36	
,, ,, ...	D. H. Raschid ...	18	9	36	3	12	36	
Third Grade Sanitary Inspector ...	Z. Grey Coker ...		—			—		
,, ,, ...	M. A. Mammah ...	3	10	36	10	11	36	
,, ,, ...	——							
Fourth Grade Sanitary Inspectors ...	Eight							
Fifth Grade Sanitary Inspectors and Learners	Thirty							

Medical and Health Clerical Staff.

Chief Clerk ...	S. G. Randall ...		—			—		Transferred 4-7-36.
,, ...	E. S. George ...	22	12	36		—		
Second Grade Clerk ...	H. H. Lewis ...	27	2	36		—		
,, ...	J. A. Williams ...	21	2	36	27	3	36	
Senior Third Grade Clerks	Eight							
Junior Third Grade Clerks	Six							

II—FINANCE.

1936 Estimates—Expenditure.

Medical.

Personal Emoluments :

	£
European	14,618
African	20,739
Allowances	801
Total	36,158

Other Charges :

	£
Medical supplies and hospital equipment	4,419
Diets, provisions, etc.	3,445
Contribution to various associations and subsidies to institutions	2,700
Transport, freight, etc.	911
Other items	680
Purchase of new ambulance	430
Total ...	12,585

Health.

Personal Emoluments :

	£
European	3,892
African	5,016
Labour	5,750
Total ...	14,658

Other Charges :

	£
Refuse disposal	761
Preventive measures	964
Transport	1,093
Other items	113
Purchase of two lorries	562
Total ...	3,493

Receipts.

	£
Hospital fees	1,070
Lunatic Hospital fees	189
Sale of medicines	1,220
Total ...	2,479

III—RETURN OF DISEASES AND DEATHS—EUROPEAN.

Diseases.	IN-PATIENTS. Remaining in Hospital at end of 1935.	Total Admission.	Total Cases treated.	Deaths.	Remaining in Hospital at end of 1936.	Out-patients.
I—Epidemic, Endemic, and Infectious Diseases.						
1. Enteric Group :						
(*a*) Typhoid fever	...	1	1	...	1	1
(*b*) Paratyphoid A.	...	...	...	...	...	...
2. Typhus	...	1	1	...	...	...
5. Malaria :						
(*a*) Tertian	...	1	1	...	1	7
(*b*) Quartan	...	2	2	...	...	5
(*c*) Aestivo-autumnal	2	30	32	...	1	33
(*d*) Cachexia	...	...	...	...	...	...
(*e*) Unclassified	...	18	18	...	3	29
(*f*) Blackwater	1	1	2	...	...	...
7. Measles	...	1	1	...	...	...
9. Whooping cough	...	1	1	...	...	...
10. Diphtheria	...	1	1	...	...	...
16. Dysentery :						
(*a*) Amœbic	2	2	4	...	...	2
(*b*) Bacillary	...	2	2	...	...	...
(*c*) Undefined or due to other causes	...	1	1	...	...	2
38. Syphilis :						
(*a*) Primary	...	...	...	...	...	3
39. Soft chancre	...	2	2	...	...	2
40. A.—Gonorrhœa and its complications	...	1	1	...	1	9
C.—Gonorrhœal arthritis ...	...	1	1	...	...	...
41. Septicæmia	...	...	...	...	...	1
II—General Diseases not mentioned above.						
44. Cancer or other malignant tumours of the stomach or liver ...	...	1	1	1	...	...
48. Cancer or other malignant tumours of the skin	...	2	2	...	...	...
50. Tumours, non-malignant ...	...	...	...	...	...	1
51. Acute rheumatism	...	...		...	...	1
52. Chronic rheumatism	...	2	2	...	...	11
57. Diabetes (not including insipidus)	...	1	1	...	1	...
58. Anæmia :						
(*b*) Other anæmias and chlorosis ...	...	2	2	...	...	8
Carried forward ...	5	74	79	1	8	115

The form shows in the main the arrangement of diseases in the International Nomenclature, 1921 Edition To save space the unimportant diseases of any class can be grouped in their places as " Other Diseases " of the class

EUROPEAN—*continued.*

Diseases.	IN-PATIENTS. Remaining in Hospital at end of 1935.	Total Admission.	Total Cases treated.	Deaths.	Remaining in Hospital at end of 1936.	Out-patients.
Brought forward ...	5	74	79	1	8	115
II—GENERAL DISEASES NOT MENTIONED ABOVE—*continued.*						
66. Alcoholism	...	1	1	...	...	...
69. Other general diseases	...	...	...	...	...	2
III—AFFECTIONS OF THE NERVOUS SYSTEM AND ORGANS OF THE SENSES.						
74. Apoplexy :						
(*a*) Hæmorrhage	...	1	1	...	...	...
75. Paralysis :						
(*a*) Hemiplegia	...	1	1	...	...	...
77. Other forms of mental alienation	...	1	1	...	...	...
82. B.—Neuritis	...	1	1	...	...	1
C.—Neurasthenia	...	6	6	...	1	4
84. Other affections of the nervous system, such as paralysis agitans	...	...	...	...	...	2
85. Affections of the Organs of Vision :						
(*a*) Diseases of the eye ...	...	...	...	...	...	5
(*b*) Conjunctivitis	...	...	...	...	...	3
(*c*) Other affections of the eye ...	...	...	...	...	...	20
86. Affections of the ear or mastoid sinus	...	...	...	...	...	19
IV—AFFECTIONS OF THE CIRCULATORY SYSTEM.						
88. Acute endocarditis, or myocarditis	...	1	1	...	...	...
90. Other diseases of the heart ...	...	1	1	...	...	1
Mitral	...	1	1	...	1	...
91. Diseases of the Arteries :						
(*b*) Arterio-sclerosis	...	...	...	...	...	1
93. Diseases of the Veins :						
Hæmorrhoids	...	...	...	...	...	1
Phlebitis	...	1	1	...	...	...
94. Diseases of the Lymphatic System :						
Lymphangitis	...	1	1	...	...	3
Lymphadenitis, bubo (non-specific)	...	2	2	...	...	2
96. Other affections of the circulatory system	...	...	...	...	...	1
V—AFFECTIONS OF THE RESPIRATORY SYSTEM.						
97. Diseases of the Nasal Passages :						
Coryza	...	...	...	...	...	13
Other diseases of the nasal passages	...	...	...	...	...	3
98. Affections of the Larynx :						
Laryngitis	...	...	...	...	...	4
99. Bronchitis :						
(*a*) Acute	...	2	2	...	...	12
(*b*) Chronic	...	1	1	...	...	...
105. Asthma	...	2	2	...	...	3
107. Other affections of the lungs ...	...	1	1	...	...	...
Carried forward ...	5	98	103	1	10	215

EUROPEAN—*continued.*

Diseases.	IN-PATIENTS.					Out-patients.
	Remaining in Hospital at end of 1935.	Total Admission.	Total Cases treated.	Deaths.	Remaining in Hospital at end of 1936.	
Brought forward ...	5	98	103	1	10	215
VI—DISEASES OF THE DIGESTIVE SYSTEM.						
108. *A*—Diseases of Teeth or Gums : Caries, pyorrhœa, etc. ...	...	2	2	...	...	20
B.—Other affections of the mouth : Stomatitis	...	...	...	...	...	2
109. Affections of the Pharynx or Tonsils :						
Tonsilitis	...	4	4	...	...	4
Pharyngitis	...	2	2	...	...	7
111. *A*.—Ulcer of the stomach ...	...	2	2	...	...	...
B.—Ulcer of the duodenum ...	...	1	1	...	...	...
112. Other Affections of the Stomach :						
Gastritis	...	...	...	...	...	2
Dyspepsia, etc.	...	...	...	...	...	21
114. Diarrhœa and Enteritis :						
Two years and over	...	3	3	...	...	18
Colitis	...	...	...	...	...	3
115. Ankylostomiasis	...	1	1	...	...	1
116. Diseases due to Intestinal Parasites :						
(*a*) Cestoda (tænia)	...	...	...	...	...	1
Ascaris	...	1	1	...	...	...
117. Appendicitis	...	7	7	1	...	2
118. Hernia	1	...	1	...	...	1
119. *A*.—Affections of the Anus, fistula, etc.	...	1	1	...	...	2
B.—Other affections of the Intestines :						
Constipation	...	1	1	...	...	1
123. Biliary calculus	...	1	1	...	...	...
124. Other Affections of the Liver :						
Hepatitis	...	2	2	...	...	...
Cholecystitis	...	1	1	...	...	...
Jaundice	...	3	3	...	1	2
127. Other affections of the digestive system	...	...	...	...	...	4
Carried forward ...	6	130	136	2	11	306

EUROPEAN—*continued.*

Diseases.	IN-PATIENTS. Remaining in Hospital at end of 1935.	Total Admission.	Total Cases treated.	Deaths.	Remaining in Hospital at end of 1936.	Out-patients.
Brought forward	6	130	136	2	11	306
VII—DISEASES OF THE GENITO-URINARY SYSTEM (NON-VENEREAL).						
131. Other Affections of the Kidneys : Pyelitis, etc.	...	2	2	...	1	1
132. Urinary calculus	...	1	1	...	...	1
133. Diseases of the Bladder : Cystitis	...	2	2	...	...	1
134. Diseases of the Urethra : (*b*) Other	...	1	1	...	...	2
135. Diseases of the Prostate : Prostatitis	...	...	...	...	...	3
136. Diseases (non-venereal) of the Genital Organs of Man :						
Epididymitis	...	1	1	...	...	...
Orchitis	...	1	1	...	...	...
Hydrocele	...	1	1	...	...	...
Ulcer of penis	...	...	...	...	...	2
Other Diseases of the Male Genital Organs	...	1	1	...	...	4
141. *A.*—Metritis	...	1	1	...	...	...
B.—Other Affections of the Female Genital Organs ...	...	...	...	...	...	...
Amenorrhœa	...	1	1	...	...	2
VIII—PUERPERAL STATE.						
143. *B*—Accidents of pregnancy : (*a*) Abortion	...	1	1	...	...	...
(*b*) Ectopic gestation ...	...	2	2	...	...	...
IX—AFFECTIONS OF THE SKIN AND CELLULAR TISSUES.						
152. Boil	...	3	3	...	...	17
Carbuncle	...	2	2	...	...	1
153. Cellulitis	...	10	10	...	...	5
154. *A.*—Tinea	...	...	...	...	...	9
B.—Scabies	...	...	...	...	...	1
155. Other diseases of the skin ...	...	1	1	...	...	21
(*b*) Urticaria	...	...	...	...	...	3
(*c*) Eczema	...	...	..	...	...	6
(*d*) Herpes	...	...	...	...	...	2
(*g*) Myiasis	...	...	...	...	..	1
(*h*) Chigoes	...	...	...	...	...	3
(*j*) Ulcer	...	1	1	...	...	11
Carried forward ...	6	162	168	2	12	402

EUROPEAN—*continued.*

Diseases.	IN-PATIENTS. Remaining in Hospital at end of 1935.	Total Admission.	Total Cases treated.	Deaths.	Remaining in Hospital at end of 1936.	Out-patients.
Brought forward	6	162	168	2	12	402
X—DISEASES OF BONES AND ORGANS OF LOCOMOTION (OTHER THAN TUBERCULOUS).						
156. Diseases of Bones :						
Osteitis	...	...	..	...	...	1
157. Diseases of Joints :						
Arthritis	...	2	2	...	...	1
Synovitis	1	...	1	...	...	1
158. Other diseases of bones or organs of locomotion	...	...	...	...	...	8
XIV—AFFECTIONS PRODUCED BY EXTERNAL CAUSES.						
175. Food Poisoning :						
Botulism	...	2	2	...	...	1
176. Attacks of Poisonous Animals :						
Insect bite	...	...	...	...	...	6
184. Wounds (by cutting or stabbing instruments)	...	1	1	...	...	4
185. Wounds (by fall)	...	2	2	...	...	4
186. Wounds (in mines or quarries) ...	...	...	...	...	...	1
189. Injuries inflicted by animals, bites, kicks, etc.	...	...	...	...	...	1
194. Exposure to Heat :						
Heat stroke	...	...	...	...	...	1
201. *A.*—Dislocation	...	1	1	...	1	...
B.—Sprain	...	...	...	...	...	12
C.—Fracture	...	4	4	...	...	3
202. Other external injuries ...	...	3	3	...	...	20
XV—ILL-DEFINED DISEASES.						
Pyrexia	...	3	3	...	2	5
Undiagnosed	...	...	...	...	...	3
Total	7	180	187	2	15	474

IV—RETURN OF DISEASES AND DEATHS—AFRICAN.

Diseases.	IN-PATIENTS. Remaining in Hospital at end of 1935.	Total Admission.	Total Cases treated.	Deaths.	Remaining in Hospital at end of 1936.	Out-patients.
I—Epidemic, Endemic and Infectious Diseases.						
1. Enteric Group :						
(*a*) Typhoid fever	...	12	12	4	...	3
(*b*) Paratyphoid A.	...	1	1	...	...	...
(*d*) Type not defined	...	1	1	1	...	...
2. Typhus	...	2	2	...	...	1
5. Malaria :						
(*a*) Tertian	...	6	6	...	...	45
(*b*) Quartan	1	51	52	...	...	147
(*c*) Aestivo-autumnal	...	178	178	...	2	568
(*d*) Cachexia	...	...	...	...	...	258
(*e*) Unclassified	6	182	188	4	3	6,362
(*f*) Blackwater	...	1	1	...	...	8
6. Smallpox	...	62	62	12	11	129
Alastrim	...	...	...	...	...	1
7. Measles	...	31	31	...	1	302
9. Whooping cough	...	6	6	...	...	74
12. Miliary fever	...	...	...	...	...	1
13. Mumps	...	...	...	...	...	7
16. Dysentery :						
(*a*) Amœbic	3	67	70	3	2	188
(*b*) Bacillary	...	3	3	2	...	5
(*c*) Undefined or due to other causes	1	15	16	2	1	282
18. Yellow fever	...	1	1	...	...	...
20. Leprosy	12	2	14	2	11	181
21. Erysipelas	...	1	1	...	...	...
22. Acute poliomyelitis	...	...	...	...	...	2
23. Encephalitis lethargica	...	...	...	...	...	1
25. Other Epidemic Diseases :						
(*a*) Rubeola (German measles) ...	...	...	...	...	...	2
(*b*) Varicella (chicken-pox) ...	4	77	81	...	3	73
(*g*) Yaws	7	46	53	...	8	8,149
(*h*) Trypanosomiasis	...	2	2	...	...	1
28. Rabies	...	...	...	...	...	1
29. Tetanus	1	27	28	19	...	15
30. Mycosis	...	...	...	...	...	1
31. Tuberculosis, pulmonary and laryngeal	1	42	43	20	2	188
32. Tuberculosis of the meninges or central nervous system	...	2	2	2	...	2
33. Tuberculosis of the intestines or peritoneum	...	6	6	3	1	1
34. Tuberculosis of the vertebral column	...	...	...	...	...	4
35. Tuberculosis of bones and joints ...	...	6	6	...	1	9
36. Tuberculosis of other Organs :						
(*a*) Skin or subcutaneous tissue (Lupus)	1	1	2	...	...	...
(*c*) Lymphatic system	...	1	1	...	...	6
(*e*) Other organs	...	1	1	...	...	2
Carried forward ...	37	833	870	74	46	17,019

The form shows in the main the arrangement of diseases in the International Nomenclature, 1921 Edition. To save space the unimportant diseases of any class can be grouped in their places as "Other Diseases" of the class.

AFRICAN—*continued.*

Diseases.	IN-PATIENTS. Remaining in Hospital at end of 1935.	Total Admission.	Total Cases treated.	Deaths.	Remaining in Hospital at end of 1936.	Out-patients.
Brought forward ...	37	833	872	74	46	17,019
I—EPIDEMIC, ENDEMIC AND INFECTIOUS DISEASES—*continued.*						
37. Tuberculosis disseminated :						
(*b*) Chronic	1	...	1	1	...	...
38. Syphilis :						
(*a*) Primary	2	1	3	...	...	30
(*b*) Secondary	1	3	4	...	...	131
(*c*) Tertiary	5	19	24	2	3	513
(*d*) Hereditary	...	...	...	...	...	5
(*e*) Period not indicated ...	1	13	14	1	...	42
39. Soft chancre	...	10	10	...	...	151
40. *A.*—Gonorrhœa and its complications	1	50	51	...	2	2,426
B.—Gonorrhœal ophthalmia ...	...	7	7	...	...	36
C.—Gonorrhœal arthritis ...	...	16	16	...	1	195
D.—Granuloma venereum ...	...	6	6	...	...	8
41. Septicæmia	...	11	11	8	...	2
42. Other infectious diseases ...	...	...	...	...	...	8
II—GENERAL DISEASES NOT MENTIONED ABOVE.						
43. Cancer or other malignant tumours of the buccal cavity	...	...	...	...	...	2
44. Cancer or other malignant tumours of the stomach or liver	...	3	3	1	...	4
45. Cancer or other malignant tumours of the peritoneum intestines, rectum	...	3	3	3	...	2
46. Cancer or other malignant tumours of the female genital organs ...	...	3	3	...	...	...
47. Cancer or other malignant tumours of the breast	...	1	1	1	...	2
48. Cancer or other malignant tumours of the skin	1	2	3	...	1	7
49. Cancer or other malignant tumours of organs not specified ...	1	10	11	1	3	1
50. Tumours, non-malignant ...	4	58	62	...	2	215
51. Acute rheumatism	...	...	...	...	...	1
52. Chronic rheumatism	8	52	60	4	11	10,598
53. Scurvy (including Barlow's disease)	...	...	...	...	...	1
55. Beri-beri	...	5	5	2	1	5
56. Rickets	...	2	2	...	...	10
57. Diabetes (not including insipidus)	...	...	...	...	...	7
58. Anæmia :						
(*a*) Pernicious	...	...	...	...	...	1
(*b*) Other anæmias and chlorosis ...	...	18	18	7	1	408
Avitaminosis	6	52	58	12	4	911
Carried forward ...	68	1,178	1,246	117	75	32,741

AFRICAN—*continued.*

Diseases.	IN-PATIENTS. Remaining in Hospital at end of 1935.	Total Admission.	Total Cases treated.	Deaths.	Remaining in Hospital at end of 1936.	Out-patients.
Brought forward ...	68	1,178	1,246	117	75	32,741
II—GENERAL DISEASES NOT MENTIONED ABOVE—*continued.*						
60. Diseases of the Thyroid Gland :						
(*a*) Exophthalmic goitre ...	...	6	6	...	...	18
(*b*) Other diseases of the thyroid gland, myxœdema	...	4	4	...	...	22
64. Diseases of the spleen	1	6	7	2	2	234
65. Leukæmia :						
(*b*) Hodgkin's disease	...	...	...	...	...	2
66. Alcoholism	...	...	...	...	...	1
69. Other general diseases	...	17	17	...	2	222
Auto-intoxication	...	...	...	...	...	33
Hæmophilia	...	...	...	...	...	1
Diabetes insipidus	...	1	1	...	...	3
III—AFFECTIONS OF THE NERVOUS SYSTEM AND ORGANS OF THE SENSES.						
70. Encephalitis (not including encephalitis lethargica)	...	...	...	...	..	2
71. Meningitis (not including tuberculous meningitis or cerebro-spinal meningitis)	...	3	3	1	1	...
72. Locomotor ataxia	1	3	4	...	...	12
73. Other affections of the spinal cord	...	6	6	1	...	3
74. Apoplexy :						
(*a*) Hæmorrhage	...	3	3	3	...	1
(*b*) Embolism	...	1	1	...	...	...
(*c*) Thrombosis	...	1	1	...	...	2
75. Paralysis :						
(*a*) Hemiplegia	8	32	40	9	9	96
(*b*) Other paralysis	9	16	25	2	5	59
76. General paralysis of the insane	...	...	...	...	...	2
77. Other forms of mental alienation	12	38	50	9	15	13
78. Epilepsy	...	10	10	1	1	36
80. Infantile convulsions	...	3	3	...	...	11
81. Chorea	...	...	...	...	...	1
82. *A.*—Hysteria	...	3	3	...	...	2
B.—Neuritis	...	5	5	1	1	195
C.—Neurasthenia	...	3	3	...	1	39
84. Other affections of the nervous system, such as paralysis agitans	1	1	2	...	...	136
85. Affections of the Organs of Vision :						
(*a*) Diseases of the eye ...	8	23	31	2	6	384
(*b*) Conjunctivitis	...	41	41	...	3	1,031
(*c*) Trachoma	...	2	2	...	...	48
(*d*) Tumours of the eye ...	...	2	2	...	...	10
(*e*) Other affections of the eye ...	...	24	24	...	2	612
86. Affections of the ear or mastoid sinus	3	15	18	...	1	1,112
Carried forward ...	111	1,447	1,558	148	124	37,084

AFRICAN—*continued.*

Diseases.	IN-PATIENTS. Remaining in Hospital at end of 1935.	Total Admission.	Total Cases treated.	Deaths.	Remaining in Hospital at end of 1936.	Out-patients.
Brought forward ...	111	1,447	1,558	148	124	37,084
IV—AFFECTIONS OF THE CIRCULATORY SYSTEM.						
87. Pericarditis	...	1	1	...	...	1
89. Angina pectoris	...	1	1	...	...	1
90. Other diseases of the heart ...	...	5	5	1	...	74
(*a*) Valvular	2	30	32	2	...	44
Mitral	1	18	19	4	2	132
Aortic	...	3	3	2	...	19
Tricuspid	...	...	...	...	...	1
Pulmonary	...	...	...	...	...	2
(*b*) Myocarditis	1	10	11	2	...	33
91. Diseases of the Arteries :						
(*a*) Aneurism	...	2	2	...	...	10
(*b*) Arterio-sclerosis	2	1	3	...	...	17
92. Embolism or thrombosis (non-cerebral)	...	...	...	...	...	1
93. Diseases of the Veins :						
Hæmorrhoids	1	8	9	...	...	92
Varicose veins	...	...	...	...	...	10
Phlebitis	...	1	1	...	...	4
94. Diseases of the Lymphatic system :						
Lymphangitis	...	...	...	...	...	58
Lymphadenitis, bubo (non-specific)	4	54	58	...	1	602
95. Hæmorrhage of undetermined cause	...	5	5	...	...	3
96. Other affections of the circulatory system	...	2	2	...	...	30
V—AFFECTIONS OF THE RESPIRATORY SYSTEM.						
97. Diseases of the Nasal Passages	...	...	...	...	...	...
Adenoids	...	2	2	...	...	21
Polypus	...	...	...	...	...	7
Rhinitis	...	1	1	...	...	35
Coryza	...	2	2	...	...	1,131
Other diseases of the nasal passages	...	..	...	...	...	13
98. Affections of the Larynx :						
Laryngitis	...	1	1	...	...	98
99. Bronchitis :						
(*a*) Acute	4	116	120	...	3	7,208
(*b*) Chronic	2	41	43	...	2	5,498
100. Broncho-pneumonia	...	55	55	10	1	50
101. Pneumonia :						
(*a*) Lobar	4	41	45	13	4	81
(*b*) Unclassified	2	73	75	16	2	70
102. Pleurisy, empyema	1	23	24	3	1	167
103. Congestion of the lungs ...	...	1	1	1	...	...
104. Gangrene of the lungs ...	...	1	1	1	...	4
105. Asthma	...	7	7	1	...	233
Carried forward ...	135	1,952	2,087	204	140	52,834

AFRICAN—*continued.*

	Diseases.	IN-PATIENTS. Remaining in Hospital at end of 1935.	Total Admission.	Total Cases treated	Deaths.	Remaining in Hospital at end of 1936.	Out-patients.
	Brought forward ...	135	1,952	2,087	204	140	52,834
	V—AFFECTIONS OF THE RESPIRATORY SYSTEM—*continued.*						
106.	Pulmonary emphysema ...	...	...	...	...	...	1
107.	Other affections of the Lungs ...	...	2	2	...	...	255
	VI—DISEASES OF THE DIGESTIVE SYSTEM.						
108.	*A.*—Diseases of Teeth or Gums: Caries, pyorrhœa, etc. ...	1	14	15	1	...	1,879
	B.—Other Affections of the Mouth: Stomatitis	...	4	4	1	...	384
	Glossitis, etc.	...	5	5	1	...	86
109.	Affections of the Pharynx or Tonsils: Tonsilitis	...	21	21	...	...	470
	Pharyngitis	...	1	1	...	...	97
110.	Affections of the œsophagus ...	...	1	1	...	...	16
111.	*B.*—Ulcer of the duodenum ...	...	3	3	...	...	...
112.	Other Affections of the Stomach: Gastritis	...	3	3	...	...	497
	Dyspepsia, etc.	...	28	28	2	1	4,371
113.	Diarrhœa and Enteritis: Under two years	...	9	9	2	...	416
114.	Diarrhœa and Enteritis: Two years and over	1	87	88	11	1	1,182
	Colitis	...	3	3	...	1	18
115.	Ankylostomiasis	3	36	39	1	...	364
116.	Diseases due to Intestinal Parasites:						
	(*a*) Cestoda (tænia)	...	3	3	...	1	230
	(*c*) Nematoda (other than ankylostoma)	...	1	1	...	...	7
	Ascaris	...	50	50	1	...	6,530
	Trichocephalus dispar ...	...	1	1	...	...	1
	Trichina	...	...	...	...	...	5
	Strongylus	...	...	...	...	...	4
	(*e*) Other parasites	...	...	...	...	...	5
	(*f*) Unclassified	...	2	2	...	...	7
117.	Appendicitis	...	22	22	3	1	10
118.	Hernia	16	385	401	14	15	701
119.	*A.*—Affections of the anus, fistula, etc.	3	24	27	2	7	93
	B.—Other affections of the intestines	1	7	8	2	...	10
	Constipation	...	12	12	1	...	9,687
122.	Cirrhosis of the Liver:						
	(*b*) Other forms	...	9	9	...	2	7
	Carried forward ...	160	2,685	2,845	246	169	80,167

AFRICAN—*continued.*

Diseases	IN-PATIENTS. Remaining in Hospital at end of 1935.	Total Admission.	Total Cases treated.	Deaths.	Remaining in Hospital at end of 1936.	Out-patients
Brought forward ...	160	2,685	2,845	246	169	80,167
VI—DISEASES OF THE DIGESTIVE SYSTEM—*continued.*						
124. Other affections of the liver ...	...	4	4	2	...	6
Abscess	...	9	9	1	1	6
Hepatitis	...	26	26	1	...	98
Cholecystitis	...	3	3	..	1	3
Jaundice	...	9	9	1	...	43
126. Peritonitis (of unknown cause) ...	...	3	3	2	...	3
127. Other affections of the digestive system	...	16	16	1	...	814
VII—DISEASES OF THE GENITO-URINARY SYSTEM (NON-VENEREAL).						
128. Acute nephritis	1	10	11	1	...	94
129. Chronic	2	39	41	9	3	188
130. *A.*—Chyluria	...	...	...	...	...	1
B.—Schistosomiasis	...	15	15	2	...	83
131. Other affections of the Kidneys: Pyelitis, etc.	...	11	11	1	...	64
132. Urinary calculus	...	2	2	...	...	11
133. Diseases of the Bladder: Cystitis	2	12	14	1	...	152
134. Diseases of the Urethra:						
(*a*) Stricture	1	79	80	5	5	145
(*b*) Other	...	15	15	2	2	159
135. Diseases of the Prostate:						
Hypertrophy	...	1	1	...	...	1
Prostatitis	...	2	2	...	1	5
136. Diseases (non-venereal) of the Genital Organs of Man:						
Epididymitis	...	9	9	...	...	60
Orchitis	1	29	30	...	2	218
Hydrocele	7	106	113	...	4	266
Ulcer of penis	2	38	40	...	2	354
Other diseases of the male genital organs	...	40	40	6	...	101
137. Cysts or other non-malignant tumours of the ovaries ...	...	6	6	...	...	24
138. Salpingitis	1	22	23	...	...	80
Abscess of the pelvis	...	...	...	...	...	1
139. Uterine tumours (non-malignant)	2	33	35	3	2	67
140. Uterine hæmorrhage (non-puerperal)	...	1	1	...	...	81
141. *A.*—Metritis	...	1	1	...	...	147
B.—Other affections of the female genital organs	1	33	34	...	...	505
Displacements of uterus ...	...	2	2	...	...	9
Amenorrhœa	...	2	2	...	...	1,421
Dysmenorrhœa	...	1	1	...	...	424
Leucorrhœa	...	1	1	...	...	77
Carried forward ...	180	3,265	3,445	284	192	85,878

AFRICAN—*continued.*

Diseases.	IN-PATIENTS. Remaining in Hospital at end of 1935.	Total Admission.	Total Cases treated.	Deaths.	Remaining in Hospital at end of 1936.	Out-patients.
Brought forward ...	180	3,265	3,445	284	192	85,878
VII—DISEASES OF THE GENITO-URINARY SYSTEM (NON-VENEREAL)—*continued.*						
142. Diseases of the breast (non-puerperal):						
Mastitis		6	6	...	...	76
Abscess of breast		2	2	...	...	36
VIII—PUERPERAL STATE.						
143. *A.*—Normal labour	9	434	443	...	10	4
B.—Accidents of pregnancy:						
(*a*) Abortion	1	34	35	...	2	51
(*b*) Ectopic gestation	...	2	2	1	...	...
(*c*) Other accidents of pregnancy	4	140	144	...	4	157
145. Other accidents of parturition ...	...	8	8	5	...	33
146. Puerperal septicæmia	...	3	3	1	...	5
147. Phlegmasia dolens	...	1	1	...	...	...
148. Puerperal eclampsia	...	1	1	...	...	...
149. Sequelæ of labour	...	6	6	...	...	3
150. Puerperal affections of the Breast	...	1	1	...	...	4
IX—AFFECTIONS OF THE SKIN AND CELLULAR TISSUES.						
151. Gangrene	1	1	2	1	...	1
152. Boil	...	9	9	...	...	467
Carbuncle	1	9	10	2	1	38
153. Abscess	6	127	133	1	3	641
Whitlow	3	9	12	...	1	284
Cellulitis	3	76	79	...	3	281
154. *A.*—Tinea	...	...	.	...	...	490
B.—Scabies	...	3	3	...	...	1,738
155. Other diseases of the skin ...	...	5	5	...	...	921
(*a*) Erythema	...	...	...	...	...	24
(*b*) Urticaria	...	2	2	...	...	58
(*c*) Eczema	...	1	1	...	...	320
(*d*) Herpes	...	4	4	...	1	45
(*e*) Psoriasis	...	1	1	...	...	56
(*f*) Elephantiasis	14	113	127	2	4	301
(*g*) Myiasis	...	...	...	...	...	1
(*h*) Chigoes	...	...	...	...	...	20
(*j*) Ulcer	37	207	244	12	34	6,032
X—DISEASES OF BONES AND ORGANS OF LOCOMOTION (OTHER THAN TUBERCULOUS).						
156. Diseases of Bones:						
Osteitis	1	21	22	1	2	332
Carried forward ...	260	4,491	4,751	310	257	98,297

AFRICAN—*continued.*

Diseases.	IN-PATIENTS. Remaining in Hospital at end of 1935.	Total Admission.	Total Cases treated.	Deaths.	Remaining in Hospital at end of 1936.	Out-patients.
Brought forward ...	260	4,491	4,751	310	257	98,297
X—DISEASES OF BONES AND ORGANS OF LOCOMOTION (OTHER THAN TUBERCULOUS)—*continued.*						
157. Diseases of Joints :						
Arthritis	5	72	77	2	4	1,726
Synovitis	...	32	32	...	1	211
158. Other diseases of bones or organs of locomotion	6	38	44	1	1	765
XI—MALFORMATIONS.						
159. Malformations	1	...	1	...	...	5
Hydrocephalus	...	2	2	...	2	1
Hypospadias	...	...	...	...	...	1
XII—DISEASES OF INFANCY.						
160. Congenital debility	...	1	1	...	...	...
161. Premature birth	...	1	1	1	...	...
162. Other affections of infancy ...	...	5	5	1	...	14
163. Infant neglect (infants of three months or over)	...	2	2	1	...	5
XIII—AFFECTIONS OF OLD AGE.						
164. Senility :						
Senile dementia	...	4	4	1	1	89
XIV—AFFECTIONS PRODUCED BY EXTERNAL CAUSES.						
171. Suicide by cutting or stabbing instruments	...	1	1	...	...	...
175. Food Poisoning :						
Botulism	...	1	1	...	...	1
176. Attacks of Poisonous Animals :						
Snake bite	...	7	7	2	...	27
Insect bite	...	...	...	...	...	57
177. Other accidental poisonings ...	...	...	...	...	...	14
178. Burns (by fire)	3	19	22	4	1	115
179. Burns (other than by fire) ...	3	10	13	...	...	149
180. Suffocation (accidental) ...	...	...	...	...	...	1
182. Drowning (accidental)	...	1	1	...	...	...
183. Wounds (by firearms, war excepted)	...	11	11	2	...	14
184. Wounds (by cutting or stabbing instruments)	3	49	52	1	3	1,148
185. Wounds (by fall)	2	28	30	7	2	624
186. Wounds (in mines or quarries) ...	...	...	...	...	...	2
187. Wounds (by machinery) ...	...	1	1	...	...	27
188. Wounds (crushing, e.g. railway accidents, etc.)	1	2	3	...	...	61
Carried forward ...	284	4,778	5,062	333	272	103,354

AFRICAN—*continued.*

Diseases.	IN-PATIENTS					Out-patients.
	Remaining in Hospital at end of 1935.	Total Admission.	Total Cases treated.	Deaths.	Remaining in Hospital at end of 1936.	
Brought forward ...	284	4,778	5,062	333	272	103,354
XIV—AFFECTIONS PRODUCED BY EXTERNAL CAUSES—*continued.*						
189. Injuries inflicted by animals, bites, kicks, etc.	1	29	30	4	2	323
190. Wounds inflicted on active service	...	...	...	...	...	298
192. *B.*—Hunger or thirst	...	2	2	1	...	4
195. Lightning stroke	...	1	1	...	...	1
196. Electric shock	...	...	...	...	...	1
198. Murder by cutting or stabbing instruments	...	...	...	...	...	1
201. *A.*—Dislocation	...	9	9	...	...	60
B.—Sprain	...	10	10	...	...	514
C.—Fracture	9	97	106	10	4	125
202. Other external injuries ...	7	175	182	5	3	4,434
XV—ILL-DEFINED DISEASES.						
205. Ascites	1	13	14	2	4	39
Œdema	...	15	15	3	...	111
Asthenia	10	21	31	14	8	864
Shock	...	1	1	...	...	2
Hyper-pyrexia	...	...	...	...	...	6
B.—Malingering	...	...	...	...	...	6
Pyrexia of uncertain origin ...	...	7	7	1	...	1
No appreciable diseases ...	...	75	75	1	...	143
Undiagnosed	3	37	40	1	2	237
TOTAL	315	5,270	5,585	375	295	110,524

TABLE V.

THE PROPORTION OF EPIDEMIC, ENDEMIC, INFECTIOUS, SYSTEMIC AND OTHER DISEASES SHOWN AS PERCENTAGES OF TOTAL CASES TREATED.

Total Hospital Cases 116,770.

Epidemic, endemic and infectious diseases	18·62
General diseases not mentioned above	11·13
Affections of the nervous system	3·55
Affections of the circulatory system	1·11
Affections of the respiratory system	13·09
Affections of the digestive system	24·82
Affections of the genito-urinary system and puerperal state	5·41
Affections of the skin and cellular tissues and diseases of the bones and joints	13·41
Affections produced by external causes	7·32
Other diseases	1·48

Total Hospital Deaths 377.

Epidemic, endemic and infectious diseases	22·81
General diseases not mentioned above	9·01
Affections of the nervous system	7·69
Affections of the circulatory system	2·91
Affections of the respiratory system	11·93
Affections of the digestive system	13·26
Affections of the genito-urinary system and puerperal state	10·07
Affections of the skin and cellular tissues and diseases of bones and joints	5·83
Affections produced by external causes	9·54
Other diseases	6·89

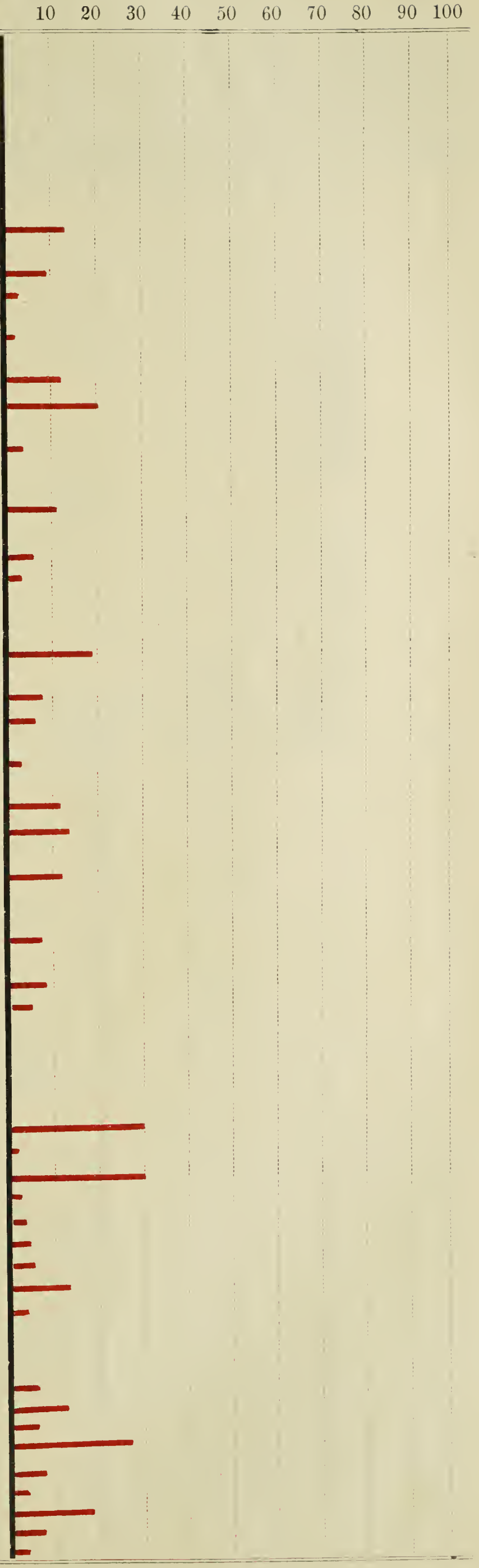
THE PROPORTION OF ENDEMIC AND INFECTIOUS DISEASES.

Total Hospital Cases 21,748.

Malaria	36·51
Smallpox	·87
Yaws	37·71
Leprosy	·89
Tuberculosis	1·25
Dysentery	2·64
Syphilis and soft chancre ...	4·29
Gonorrhœa	12·67
Other infectious diseases ...	3·12

Total Hospital Deaths 86.

Malaria	4·65
Smallpox	13·95
Leprosy	2·32
Tuberculosis	30·23
Dysentery	8·13
Soft chancre and syphilis ...	3·48
Tetanus	22·09
Septicaemia	9·3
Other infectious diseases ...	5·81



A—REPORT OF THE SENIOR SPECIALIST FOR THE YEAR 1936.

I have set out below figures for operative work for the year 1936. The numbers are somewhat less than those for 1935; this is due to a decrease in the minor operations performed by Medical Officers in the out-patient department. The operations performed in the main theatre are actually more than in 1935. It has not been found possible yet to provide a Ward X-ray for fractures or a modern genito-urinary department both of which are necessities in a modern hospital, and should be installed as soon as financial conditions permit. I append a report of interesting cases seen during the year.

Percentage of deaths	1·4

Number of operations performed :—

1926	29
1927	257
1928	755
1929	761
1930	1,566
1931	1,410
1932	1,913
1933	1,877
1934	2,281
1935	2,258
1936	2,100

Anæsthetics.

Spinal	501
Ethyl chloride	146
Chloroform	180
Local	192
Intravenous	9
Rectal	11
Total ...	1,039

Operations at the Connaught and European Hospitals in 1936.

	Cured.	Relieved.	Unrelieved.	Died.
(1) *Abdominal :*				
Herniotomy-inguinal	208	—	—	—
Herniotomy-femoral	4	—	—	—
Herniotomy-epigastric	1	—	—	—
Herniotomy-umbilical	1	—	—	—
Herniotomy-strangulated ..	10	—	—	3
Gastro-enterostomy	4	—	—	—
Cholecystectomy	1	—	—	—
Closure of fæcal fistula	1	—	—	—
Enterectomy	1	—	—	1
Appendicectomy	13	—	—	—
Jejunostomy	1	—	—	1
Colostomy	1	—	—	—
Exploratory laparotomy	2	3	2	4
Aspiration of ascites	4	—	—	1
Splenectomy	1	—	—	1
Aspiration of liver abscess ..	2	—	—	—
Excision of retro peritoneal lipoma	1	—	—	—
(2) *Ano-Rectal :*				
Excision of hæmorrhoids ..	1	—	—	—
Excision of anal fissure	2	—	—	—
Excision of anal fistula	2	—	—	—
Injection of hæmorrhoids ..	6	—	—	—
Injection of fissure	3	—	—	—
Dilation of rectal stricture ..	8	—	—	—
For imperforate anus	1	—	—	—
Sigmoidoscopy	—	—	11	—
(3) *Ear, Nose and Throat :*				
Excision of ranula	1	—	—	—
Excision of nasal polypus ..	1	1	—	—
Mastoidectomy	1	—	—	—
Enucleation of tonsils and adenoids	4	—	—	—
Irrigation of antrum	2	2	—	—
Caldwell-Luc operation	1	—	—	—
Bronchoscopy	—	—	1	—
Laryngoscopy	—	—	3	—
Oesophagoscopy	—	—	1	—
Tracheotomy	—	—	—	2

	Cured.	Relieved.	Unrelieved.	Died.
(4) *Eyes :*				
Enucleation	2	—	—	—
Iridectomy	—	1	—	—
(5) *Genito-Urinary :*				
Nephrectomy	1	—	—	1
Cystoscopy	—	—	9	—
Transplantation of ureters ..	1	—	—	—
Excision of scrotum for elephantiasis	34	—	—	—
Excision of hypertrophied scrotum	34	—	—	—
Radical cure of hydrocele ..	123	—	—	—
Suprapubic prostatectomy ..	2	—	—	—
Suprapubic puncture	—	3	—	—
Suprapubic cystostomy	3	—	—	—
Suprapubic cystostomy for stone	1	—	—	—
Tapping of hydrocele	—	3	—	—
Amputation of penis	1	—	—	—
Dilatation of stricture	—	336	—	2
Perineal urethrotomy	1	3	—	—
Circumcision	9	—	—	—
Orchidectomy	5	—	—	—
Excision of epididymis	1	—	—	—
(6) *Gynæcological :*				
Hysterectomy	20	—	—	1
Myomectomy	1	—	—	—
Uterine polypus	1	—	—	—
Curettage	11	2	—	—
For extra uterine pregnancy ..	1	—	—	1
Induction of labour	2	—	—	—
For vesicular mole	1	—	—	—
Cæsarian section	1	—	—	1
Salpingo-oöphorectomy	2	—	—	—
Gilliams operation	1	—	—	—
Excision of ovarian cyst ..	2	—	—	—
Dilatation of cervix	1	—	—	—
Cauterisation of cervix	6	—	—	—
Colporrhaphy	1	—	—	—
Perineorraphy	2	—	—	—
For recto-vaginal fistula	1	—	—	—
Excision of elephantiasis of breast	1	—	—	—
Excision of breast for carcinoma ..	—	—	—	1
Excision of breast for intracanalicular fibroma	1	—	—	—
Excision of breast for sarcoma ..	1	—	—	—
Repair of vesico-vaginal fistula ..	3	—	—	—
For imperforate vagina	2	—	—	—
(7) *Head and Neck :*				
Decompression of brain	—	1	—	—
Excision of goundou	2	—	—	—
For scalenus anticus syndrome ..	1	—	—	—
For sarcoma neck	—	1	—	—
Cyst of mandible	1	1	—	—
Myeloma of mandible	1	1	—	—
Trephining	—	1	—	—
Wiring of fractured jaw	2	—	—	—
Thyroidectomy for goitre ..	3	—	—	—
Excision of epithelioma lip ..	1	—	—	—
Ligature of carotid artery ..	1	—	—	—
Avulsion of supra orbital nerve ..	1	—	—	—
(8) *Miscellaneous :*				
Laminectomy	—	—	—	1
Drainage of septic conditions ..	286	—	—	2
Excision of glands	7	—	—	—
Excision of aneurysm of Ext. iliac artery	1	—	—	—
Suture of wounds	330	—	—	—
Excision of rib for empyema ..	1	—	—	—
Aspiration of pleura	7	—	—	—
Extraction of teeth	198	—	—	—
Excision of cysts	7	—	—	—
Transfusion of blood	—	3	—	1
Removal of foreign bodies ..	40	—	—	—
Examination under anæsthesia ..	—	—	1	—
Melanoma foot	1	—	—	—

(9) *Orthopædics :*				
Reduction of fractures and separated epiphyses	25	—	—	1
Open operation for fracture ..	7	—	—	—
Reduction of dislocations ..	12	—	—	—
Open operation for dislocation ..	3	—	—	—
Extension of fracture by means of pins	18	—	—	—
Drainage and sequestrectomy for osteomyelitis	12	—	—	1
For loose body in knee	1	—	—	—
Aspiration of joints	2	—	—	—
Breaking down of adhesions in joints	—	6	—	—
Tendon suturing	1	—	—	—
Myeloma of tibia	1	—	—	—
Amputation of toe	6	—	—	—
Amputation of finger	19	—	—	—
Plaster cases	—	36	—	—
(10) *Skin and Subcutaneous Tissues :*				
Debridement of burns	6	—	—	
Excision of elephantiasis leg ..	3	—	—	—
Excision of ulcer	3	—	—	—
Skin grafting	11	—	—	—
Plastic operation	8	—	—	—
Excision of non-malignant tumours	27	—	—	—
Total	1,625	404	28	26

NOTE.—(*a*) Dilatations of stricture of the urethra and rectum are placed under the heading "Relieved" in all cases.

(*b*) Diagnostic procedures such as cystoscopy and sigmoidoscopy are placed under the heading "Unrelieved".

OPERATIONS PERFORMED IN EUROPEAN HOSPITAL.

	Cured.	Relieved.	Unrelieved.	Died.
Herniotomy	1	—	—	—
Appendicectomy	5	—	—	—
Tubal pregnancy	1	—	—	—
Perforated duodenal ulcer ..	1	—	—	—
Tapping of hydrocele	1	—	—	—
Curettage	1	—	—	—
Extraction of teeth	1	—	—	—
Paraphimosis	1	—	—	—
Drainage of septic conditions ..	3	—	—	—
Cystoscopy	—	—	2	—
Total	15	—	2	

TWO CASES OF STRANGULATED INTERNAL HERNIA.

Both of these cases were in men. The first was a man of 47 who was admitted on 22nd February, 1936 with a distended abdomen and a history of stoppage of the bowels for some days.

An enema produced no result. Although it was obvious that an obstruction was present no localisation was possible and the abdomen was opened under spinal, by a paramedian incision to the right of the umbilicus. A loop of small intestine was found to be strangulated in a peritoneal pouch in the region of the right obturator foramen. The obstruction was relieved and the opening stitched up. The bowel being viable the abdomen was closed. Post-operative distension was troublesome for some days and was not relieved by pituitrin intramuscularly, eserin or acetylcholine, but pituitrin intravenously relieved it immediately and dramatically. After this convalescence was uninterrupted.

The second case in a man of 38 was a much more serious affair. He was admitted with an exactly similar history and it was again impossible to locate the site of the obvious obstruction.

The abdomen was opened as before and an internal hernia again discovered. This had taken place through a small hole in the mesentery of the sigmoid colon and was composed of small intestine.

Two portions of small gut and the whole of the sigmoid colon were gangrenous and required resection, the end of the larger bowel being brought out and the small intestine anastomosed.

The patient's condition was bad at the beginning of the operation and it was hardly surprising that he did not survive such extensive gangrene.

Ruptured Kidney.

A Sierra Leone Bus Driver was admitted on 25th December, 1935, with a history of being involved in a motor cycle accident and receiving a blow on the left side.

On admission he was in a condition of shock and complained of severe pain in the left loin. On examination the whole of the left side of the abdomen was found to be distended by a tender swelling.

No blood was present in the urine and the condition was thought to be an injury to an abdominal organ on the left side, most probably a rupture spleen.

Owing to the patient's condition operation was not immediately performed and under restorative measures he improved so much that operation was delayed until two weeks later pain and a persisting swelling in the left abdomen led to its becoming necessary.

Under spinal an incision over the swelling on the anterior aspect of the abdomen disclosed the fact that it was retroperitoneal so that the patient was turned over and an inolumbar incision revealed a ruptured kidney surrounded by urine—swelling blood—stained fluid and clots. The kidney was found to have been torn into two at the time of the accident and the two portions were lying several inches apart, while the renal vessels were torn through. The ureter was intact and after this had been divided the portions of kidney were removed and the wound dressed. Recovery was uneventful. A remarkable feature of this case was the lack of blood in the urine leading to a mistaken diagnosis.

Ruptured Duodenal Ulcer.

An European seaman, 45 years of age, was admitted on 15th June, 1936, with a history of sudden very severe abdominal pain while at sea.

On admission the patient was collapsed and the abdominal wall rigid—all the symptoms were those of a gastric perforation and there was a definite history of previous gastric trouble.

At operation under chloroform the peritoneal cavity was found to be full of turbid fluid and a large perforation was present in the first part of the duodenum; this was closed and a drainage tube placed in the pelvis, the wound being also drained.

The patient did well immediately following operation but on the sixth day he complained of pain in his right chest and coughed up blood evidently the result of a small pulmonary infarct which kept him back somewhat; however, this cleared and he was discharged home fit a month after admission.

Aneurysm of External Iliac Artery.

Senesie, a farmer, 30 years of age was admitted with a complaint of a painful swelling in the abdomen which had been present for some months and was slowly getting larger.

On examination an irrregularly circular tumour was found to be present in the right iliac fossa, it practically filled up this area and was somewhat tender to touch. No pulsation or fluctuation could be elicited and no evidence of the nature or origin of the tumour except that there was a positive Kahn test.

Under spinal the swelling was explored and after cutting through the muscle of the abdominal wall it was found to be adherent to the peritoneum. While endeavouring to isolate the swelling it burst and a sudden and alarming gush of blood made the diagnosis only too evident. Two fingers were immediately plunged into the opening and controlled the bleeding until packing made things secure. The external iliac artery was found to run into the proximal part of the aneurysm and it was tied just beyond the bifurcation of the common iliac; the femoral was also tied below. As much of the sac as possible was removed but as most of it was very adherent this removal was not persisted in—the remainder was packed with flavine paraffin and the wound left open to a large extent so that healing could take place from the bottom. N.A.B. and Bismuth were given and healing took place quickly.

Convalescence was uninterrupted, no signs of interruption of the circulation in the limb took place, and the patient was discharge fit and walking well.

Extra-Uterine Pregnancy.

A married woman 34 years of age was referred to be with a rather indefinite history that some six months previously she had had menstrual irregularities followed by amenorrhœa and pain in the lower abdomen. Some two and a-half months later she had been examined bimanually by her medical man who said that he felt a small round mass the size of an egg which was freely movable in the right iliac fossa and that during this examination the patient had a sudden severe pain and became very shocked.

Recovery from this acute condition followed but she continually suffered from pain and vomiting and on one occasion from bleedig from the uterus.

On admission the patient was obviously very ill and the urine full of albumen. Bimanually the uterus could be palpated anteriorly enlarged about one and a-half times while behind it was a foetus whose parts could be easily felt especially the head impacted in the pouch of Douglas; movements could also be felt.

After preparatory treatment to try and get the case into better condition the abdomen was opened under spinal and the living fœtus and placenta extracted from the abdominal cavity. The placenta was attached to the back of the uterus, intestines and omentum. Everything was jumbled up together and definition and separation were not easy, hæmorrhage being free.

The patient stood the operation well but the state of her kidneys was against recovery and despite blood transfusion she died on the second day after operation.

The well-formed fœtus was roughly 24 weeks old and lived only a few minutes—it had in all probability been extruded from the right tube during the bimanual examination on which the acute symptoms supervened.

Abnormal Innominate Artery with Pressure Symptoms (?) Scalenus Anticus Syndrome.

A woman was admitted complaining of pain in the right side of the neck running down over the shoulder along the arm—the duration was of some years but had become worse recently.

On examination definite pulsation was evident on that side of the neck extending from the sterno—clavicular joint up and laterally three inches. A diagnosis of aneurysm of the subclavian was made.

Under avertin and chloroform the swelling was explored and found to be a dilated abnormal innominate artery—it ran up and out from the sterno-clavicular joint and divided into carotid and subclavian arteries at the anterior border of the scalenus anticus. It was fairly superficial in its course and this and its dilatation had given rise to the pulsation.

The subclavian appeared to be kinked by a taut scalenus anticus behind which it angled rather suddenly and it was thought advisable to divide the scalenus anticus at its attachment to the first rib.

Following this procedure the patient's pains disappeared. So it is reasonable to suppose that a scalenus anticus syndrome of a comparatively mild nature existed, along with the abnormal artery.

Q. STEWART,
Senior Specialist.

B—MATERNITY WARD.

The maternity work of the Connaught Hospital is all carried out in one ward of 14 beds with a portion of the ward adapted as a labour ward. Dr. E. J. Wright was in charge until May 9th; Dr. W. J. Laird then took over until October 21st when Dr. Wright resumed duty.

During the year 607 patients were admitted to hospital and of this number 402 gave birth in the ward. There were 145 primiparæ and 257 multiparæ. Of the 402 patients giving birth, 260 had normal labours and 142 abnormal labours. A normal labour, for the purpose of this report, is considered one in which the pelvis is normal in size, the mother is apparently healthy and suffers no injury during the birth; the pregnancy single, the baby delivered alive without aid, the vertex presenting and no undue bleeding during the labour.

The 142 abnormal labours were:—

Eleven twin labours, 54 torn perinæums requiring suture, 5 torn labia and 72 various abnormalities which are recorded later in the report.

There were 6 maternal deaths among the 607 patients due to the following causes :— Cerebral malaria, pulmonary embolism, toxæmia of pregnancy, post partum hæmorrhage, obsteric shock, collapse following dystocia.

Of the 22 twin children born in the ward, 1 was dead-born : 3 were still-born and the remaining 18 were born alive; of this number 1 died 36 hours after birth. The remaining 17 children left the ward alive.

Among the 391 single births there were 61 children lost; 30 were dead-born, 11 still-born and 20 died before the mothers left hospital.

The following Table I gives the chief feature of the 72 cases with various abnormalities. No case is counted twice but each is designated under its most salient feature.

TABLE I.

Dead-birth	17
Forceps	16
Still-births	10
Placenta prævia	3
Breech	3
Prematurity	3
Craniotomy	3
Face	2
Persistent occipito posterior	2
Retained placenta	2
Transverse	1
Brow	1
Eclampsia	1
A. P. eclampsia	1
Drug induction	1
Pulmonary tuberculosis	1
Cerebral malaria	1
Toxæmia of pregnancy	1
Hydramnios	1
Cæsarian section	2
	72

There were 205 women admitted to the Maternity Ward besides the 402 who gave birth in the ward. The following Table II gives the principle feature of each case.

TABLE II.

Malaria	65
Obseravtion	71
False pains	14
Abortion	15
Threatened abortion	1
Baby born before arrival	7
Pyelitis	1
Avitaminosis	9
Albuminuria	5
Swollen feet	2
Ante-partum hæmorrhage	2
Acute bronchitis	2
Pneumonia	1
Dental caries	1
Retained placenta	1
Epilepsy	1
Valvular disease of the heart	1
Helminthiasis	3
Amœbic dysentery	2
Jaundice	1
	205

There were no deaths among these patients.

C—ANTE-NATAL CLINIC.

This clinic was held on Tuesdays at the Maternity Centre in Oxford Street. Patients attending came from near and far. There were 716 individuals on the register for the year, a decrease of 29 compared with the year 1935 when the increase was 123 over the figure for the preceding year. Nevertheless, the number of deliveries taking place in the Maternity Ward shows an increase of 23 over the figure for 1935.

All patients attending for the first time have their histories taken and a careful internal pelvic examination is made in the case of primiparæ and other women with doubtful histories. Illness is treated, routine urine examinations made and advice given as to diet and mode of living. As in former years, food deficiency disease is prevalent in this clinic.

The following Table I gives the attendances month by month.

TABLE I.

Ante-Natal Clinic—Record of Attendances—January—December, 1936.

Month.	New Cases.	Repeated Visits.	Total.
January	43	247	290
February	57	458	515
March	63	362	425
April	47	352	399
May	64	361	425
June	53	346	399
July	61	329	390
August	49	331	380
September	73	512	585
October	65	403	468
November	67	436	503
December	74	557	631
Total	716	4,794	5,510

The Senior Health Visitor who spends all her mornings in charge of the Maternity Centre has done some visiting in connection with this clinic, and the following Table II is a record of this work during the year.

TABLE II.

Senior Health Visitor's Return of Ante-Natal Visits, 1936.

Month.	Total Number of Visits.	Number of Cases visited found to have delivered at Home.	Number of Cases visited found to have delivered in Hospital.
January	151	12	17
February	145	19	23
March	93	11	19
April	153	14	24
May	131	12	22
June	125	9	16
July	150	12	19
August	140	17	8
September	177	10	10
October	156	9	18
November	124	8	17
December	130	10	17
Total	1,675	153	210

D—POST-NATAL CLINIC.

Throughout the year, Thursday mornings at the Maternity Centre were devoted to post-natal work. Patients who gave birth in the Maternity Ward were directed to attend at the centre on the first Thursday after their discharge from hospital. They were each given a discharge ticket which had necessary information concerning their cases entered up.

Mothers who had delivered at home were directed by the District Nurses to attend this clinic where they and their children were supervised and given necessary advice and treatment for a month, after which period the children were drafted to one of the infant clinics, and the mothers if considered well were discharged.

There were 477 individuals attending this clinic this year, an increase of 99 over last year. The following Table gives the number of individuals and subsequent attendances month by month, throughout the year.

Post-Natal Clinic—Record of Attendances—January to December, 1936.

Month.	New Cases.	Subsequent Attendances.	Total.
January	54	67	121
February	46	73	119
March	30	23	53
April	55	62	117
May	43	53	96
June	31	69	100
July	42	62	104
August	22	37	59
September	31	43	73
October	48	68	116
November	32	69	101
December	43	55	98
Total	477	680	1,157

E—INFANT WELFARE CLINIC.

Infant clinics were held throughout the year at the Maternity Centre on Mondays, Wednesdays and Fridays. These clinics were well attended and there were 536 individuals on the register for the year who amongst them recorded 12,584 subsequent attendances, which gives an average attendance of once a fortnight.

The staff attached to the Maternity Centre consists of a Senior Health Visitor, two Health Visitors and a Midwife. Their work is directly supervised by a Medical Officer and the pupil midwives also attend. As far as possible, children are given definite days when they should attend and thus, it is possible to arrange that the Health Visitor in charge of the district from which the child comes attends also on that particular day to assist at the clinic.

The general method of working remained the same as last year. The Health Visitors regularly obtained lists of newly-born babies in the districts from the Registrar and made it their business to visit them; and whilst doing this, attended and advised any children under three years of age that they met on their visits, all the time looking up their old cases.

The following Table I gives the work done by the Health Visitors month by month, during the year.

TABLE I.

Health Visitors—Record of Visits—January to December, 1936.

Month.	Newly-born.	New Cases.	Repeated Visits.
January	78	15	818
February	67	12	1,034
March	86	9	717
April	63	19	992
May	59	17	532
June	75	4	553
July	68	12	1,065
August	42	9	851
September	59	7	881
October	61	7	968
November	63	14	815
December	68	11	963
Total	787	136	10,189

There were 536 individuals on the register for the year and the following Table II shows the monthly attendance. The high figure for February is explained by the stimulus the Baby Competition gives to the work. The competition was held in March this year.

TABLE II.

Month.	New Cases.	Subsequent Attendances.	Total.
January	40	1,126	1,166
February	44	1,321	1,365
March	45	907	952
April	28	840	868
May	51	1,075	1,126
June	44	869	913
July	52	1,061	1,113
August	40	1,010	1,050
September	47	1,084	1,131
October	52	1,198	1,250
November	44	1,133	1,177
December	49	960	1,009
Total	536	12,584	13,120

The following Table III gives the ages at which children were brought to the Post-Natal and Infant Welfare Clinics. The year 1935 was the first full year of operation of the Post-Natal Clinic, consequently the number of every young children attending was large—this year there has been a welcome decrease in the number of children under two weeks of age attending, although the total number of individuals for the year showed an increase.

TABLE III.

Ages at which Children were brought to the Post-Natal and Infant Welfare Clinics.

Age.	1936.	1935.	1934.	1933.	1932.
Under 1 week	53	164	37	60	27
,, 2 weeks	127	195	96	109	100
2 weeks—1 month	240	77	142	156	159
1—3 months	100	84	175	161	167
3—6 months	72	64	97	58	94
6—12 months	55	44	62	94	113
1—2 years	76	48	64	80	116
2—3 years	36	36	44	46	30
Total	759	712	737	764	806

During the year there were 1,437 births registered in Freetown with 303 deaths under 12 months, showing an infantile mortality rate of 210.

TABLE IV.

Year.	Births Registered.	Deaths under Twelve Months.	Infantile Mortality Rate.
1931	1,263	365	288
1932	1,276	348	272
1933	1,378	317	230
1934	1,339	312	233
1935	1,358	308	227
1936	1,437	303	210

These figures are given for comparison and they show progress.

E. J. WRIGHT,
Senior Medical Officer (Sierra Leone), in-charge Clinics and Maternity Centre.

CONNAUGHT HOSPITAL,
FREETOWN,
22nd February, 1937.

F—ANNUAL REPORT ON THE EYE CLINIC, 1936.

Since 25th May, on which date the clinic re-opened, the following attendances have been registered :—

New cases	464
Sub-attendances	1,236

The usual two afternoon sessions a week, between 1 p.m. and 6 p.m. have been followed.

All arsenical injections were given in the eye clinic at the time of the patients' attendance. Acetylarsan was the drug used.

Number given	262
Number of refractions performed	212
Number of prescriptions for spectacles given	72

In addition measurements were taken for all spectacle frames for which the prescription has to be sent to England for dispensing. In the case of those which could be dispensed locally, the spectacles were brought to the clinic for checking. One-third of the spectacles were dispensed locally.

Below is an analysis of cases.

Disease.	
Affections of Lids :	
Blepharitis	1
Chalazion	9
Eczema	1
Hordeolum	1
Affections of Conjunctiva :	
Conjunctivitis	64
,, phlyctenular	4
,, acute purulent	4
Cyst	1
Foreign body	2
Hæmorrhage, sub-conjunctival	6
Pterygium	5
Pseudo-pterygium	1
Trachoma	11
Affections of Sclera :	
Episcleritis	2
Affections of Cornea :	
Foreign body	5
Keratitis	8
,, interstitial	2
,, phlyctenular	1
Leucoma	6
,, adherens	1
Nebula	1
Ulcer	12
Wound, perforating	1
Affections of Iris and Ciliary Body :	
Ciliary gumma	1
Cyclitis	9
Irido-cyclitis	39
Mydriasis, traumatic	1
Affections of Choroid and Retina :	
Choroido-retinitis	12
Choroiditis, disseminated	1
Retinitis	1
Retinitis pigmentosa	1
Albuminuric neuro-retinitis	1
Retinal detachment	1
Retinal hæmorrhage	2
Uveitis	1
Affections of Optic Nerve :	
Primary optic atrophy	16
Affections of Vitreous :	
Opacities	1

Disease.	
Affections of Lens :	
Cataract	3
,, senile	9
,, traumatic	1
,, secondary	1
Errors of Refraction :	
Hypermetropia	16
Hypermetropic astigmatism	6
Compound hypermetropic astigmatism	6
Myopia	6
Myopic astigmatism	1
Compound myopic astigmatism	8
Mixed astigmatism	5
Anisometropia	1
Presbyopia	19
Errors of Accommodation :	
Paralysis	2
Miscellaneous :	
Amblyopia	38
Amblyopia ex avitaminosis	56
Minor symptoms due to avitaminosis	5
Concussion of eyeball	1
Contusion of eyeball	2
Glaucoma, chronic	3
Lachrymal adenitis	1
Panophthalmitis	1
Periostitis of orbit	1
Photophobia	1
Nuclear lesion 3.6.7. nerves	1
Trigeninal neuralgia	1
Old enucleation	1
Nothing abnormal found	13
Undiagnosed (i.e. did not return for completion of diagnosis)	19
Total	464

Operations Performed.

Chalazion	3
Evisceration of eyeball	2
Peritomy	1
Preliminary iridectomy	1
Contracted socket	1
Saemisch section	1
Psedo-pterygium	1
Curettage of globe	1
Pterygium	1
Paracentesis	1
Total	13

E. S. WALLS,
Senior Medical Officer.

G—VENEREAL DISEASE CLINIC.

Venereal Disease Return, 1936.

Disease	New Cases.			Subsequent Cases.		
	Government.	Non-Government.	Female.	Government.	Non-Government.	Total.
Gonorrhœa	32	289	18	250	6,056	6,306
Gonorrhœal arthritis ..	2	5	1	2	42	44
Gonorrhœal rheumatism	—	6	—	—	79	79
Epididymitis ..	—	3	—	—	7	7
Leucorrhœa ..	—	—	—	—	36	36
Vaginitis	—	—	1	—	31	31
Orchitis	1	6	—	6	59	65
Balanitis	—	2	—	—	8	8
Bubo	—	18	—	—	285	285
Urinary fistula ..	—	6	—	—	71	71
Peri-urethral abscess ..	1	—	—	1	—	1
Urethral stricture ..	1	9	—	2	19	21
Yaws iii	—	3	—	—	3	3
Ulcer penis	7	94	—	226	3,432	3,658
Ulcer scrotum ..	—	1	—	—	—	—
Syphilis . ..	2	52	4	8	559	567
Granuloma	—	2	2	—	30	30
Venereal warts ..	—	1	—	—	—	—
Herpes	—	1	—	—	—	—
Perineal abscess ..	—	2	—	—	43	43
Retention of urine ..	—	—	1	—	—	—
Vaginal ulcer ..	—	—	3	—	41	41
E. meningitis.. ..	1	—	—	10	—	10
G.C. conjunctivitis ..	—	1	—	—	15	15
N. A. D.	—	1	—	—	—	—
Total	47	502	30	505	10,816	11,321

ATHOL J. JOHNSON,
Medical Officer-in-charge, Venereal Disease Clinic.

Connaught Hospital,
Freetown,
18th February, 1937.

H—FREETOWN METEOROLOGICAL OBSERVATIONS, TOWER HILL, 1936.

——	Month.	Mean Pressure.	Air Temperature.						Relative Humidity. 9 a.m.	Total.	Rainfall Maximum.	Inches Date.	Number of Days Rain.
			9 a.m.	Mean.	Means of Absolute.								
					Minimum.	Maximum.	Minimum	Maximum.					
Latitude 8° 27′ N.	January ..	29·942	78·8	79·9	73·5	86·3	68	89	82·3	nil	nil	nil	nil
Longitude 13° 9′ W.	February ..	29·934	80·0	80·8	74·5	87·2	72	94	78·8	0·02	0·02	28th	1
Height above M.S.L.	March ..	29·943	81·6	81·9	74·8	89·1	71	95	74·5	1·03	0·40	29th	4
Barometer Cistern 180· 5 ft.	April	29·939	81·0	81·0	74·2	87·9	68	92	83·8	6·81	2·94	19th	16
Site of Rain Gauge 171 ft.	May	29·936	80·7	80·0	72·8	87·3	68	92	82·1	17·87	2·96	26th	23
	June ..	29·999	79·5	77·9	71·2	84·6	67	88	83·0	18·28	3·18	15th	24
	July	30·015	75·9	75·8	70·9	80·8	68	84	88·0	25·03	3·62	28th	25
	August ..	29·980	75·9	76·7	72·7	80·7	69	84	87·6	27·45	2·70	10th	24
	September ..	29·971	77·3	78·8	73·3	82·7	70	87	88·0	26·43	3·71	14th	27
	October ..	29·960	79·1	79·4	73·2	85·6	69	89	83·2	10·09	1·58	11th	27
	November ..	29·924	80·0	80·0	74·7	85·4	71	89	83·9	10·91	4·50	20th	16
	December ..	29·937	80·0	80·8	75·5	86·2	72	89	79·3	0·48	0·33	12th	3
	Year ..	29·956	79·1	79·4	73·4	85·3	69·4	89·3	82·8	144·40	4·50	20th Nov.	190

I—GOVERNMENT HOSPITAL BED ACCOMMODATION.

—	Hospital.		European.				African.				Dispensaries.	Medical Staff.	Remarks.
	European.	African.	Total Beds at present.		Number of Beds possible.		Total Beds at present.		Number of Beds possible.				
			M.	F.	M.	F.	M.	F.	M.	F.			
European Hospital ..	1	—	14 both	sexes	14 both	sexes	—	—	—	—	—	1	For European and Wilberforce Barracks
Connaught Hospital ..	—	1	—	—	—	—	70 & 5 cots	40 & 5 cots	70 & 5 cots	40 & 5 cots	1	5	
Cape Quarantine ..	—	1	—	—	—	—	28 both	sexes	28 both	sexes	—	—	
Wilberforce Barracks ..	—	1	—	—	—	—	10	—	10	—	—	—	
Pujehun Hospital ..	—	1	—	—	—	—	17	15	17	15	1	1	
Daru Hospital ..	—	1	—	—	—	—	18	10	18	10	1	1	
Bonthe Hospital ..	—	1	—	—	—	—	19	16	19	16	1	1	
Bo Hospital	—	1	—	—	—	—	20	7	20	7	1	1	
Makeni Hospital ..	—	1	—	—	—	—	18	5	18	5	1	1	
Port Loko Hospital ..	—	1	—	—	—	—	7	4	14	6	1	1	
Moyamba Hospital ..	—	1	—	—	—	—	14	6	14	6	1	1	
Kissy (*a*) Lunatic Asylum ..	—	1	—	—	—	—	52	38	52	38	1	1	
(*b*) Infirmaries ..	—	1	—	—	—	—	38	35	38	35	—	—	
(*c*) Leper Asylum	—	1	—	—	—	—	17	—	17	—	—	—	
(*d*) Infectious Diseases ..	—	1	—	—	—	—	27	4	27	4	—	—	

J—SUBSIDISED MISSION HOSPITAL BED ACCOMMODATION.

	Hospital.		European.				African.				Dispenser.	Medical Staff.
	European.	African.	Total Beds at present.		No. of Beds possible.		Total Beds at present.		No of Beds possible.			
			Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.		
Princess Christian Mission Hospital ...	—	1	—	2	—	2	—	32	—	32	—	1 (qualified)
Kamakwie Hospital (American Wesleyan Mission) ...	—	1	—	—	—	—	18 beds (both sexes)		18 beds (both sexes)		—	1 (qualified)
Tiama Hospital (United Brethren in Christ Mission)	—	1	—	—	—	—	12 beds (both sexes)		12 beds (both sexes)		—	1 (qualified)
Segbwema Hospital (Wesleyan Methodist Mission) ...	—	1	—	—	—	—	24 beds (both sexes)		24 beds (both sexes)		—	1 (qualified)
Jaiama Hospital (United Brethren in Christ Mission)	—	1	—	—	—	—	10 beds (both sexes)		10 beds (both sexes)		—	1 (qualified)